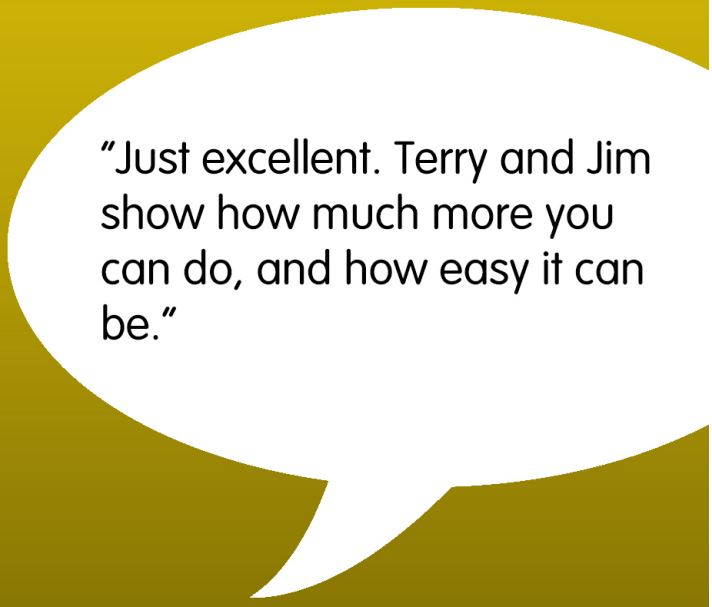
A We Got Served Step by Step Guide



Terry Walsh & Jim Clark

25 Essential Windows Home Server Projects

eBook Edition

25 Essential Windows Home Server Projects

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Dedication

For the awesome Windows Home Server community and readers of We Got Served who have followed and supported our continuing adventures over the past five years. Thank you.

About the Authors

Terry Walsh

Terry Walsh is the Owner and Editor of We Got Served (http://www.wegotserved.com), which he established in 2007 to share his own experiences with emerging Home Server platforms.

Since then, the site has grown to cover a wide range of digital home, consumer electronics, and small business product categories but retains at its core the mission to help users make the most of technology.

Terry graduated from the University of Durham in 1995 with a Bachelor of Arts in English Language and Literature. He's worked in a variety of senior retail marketing, innovation consultancy and product management roles for a variety of blue-chip brands including Citibank, RBS, DSGi, John Lewis, Tesco, Barclays, SK Telecom and Unilever amongst others, but has much more fun writing about technology in his spare time. Prior to starting WGS, Terry cut his teeth online in 1993 building and operating a number of successful alternative music websites and communities for UK artists.

Born and raised in Liverpool, England and now living in Silverstone with his wife and two sons, Terry has been awarded Microsoft's Most Valuable Professional Award each year since 2008 for his work on We Got Served.

This is Terry's third book, following publication of Using OS X Lion Server at Home and Windows Home Server 2011 Step by Step.

You can contact him at terry@wegotserved.co.uk, or via Twitter at @wegotserved.

Jim Clark

Jim Clark is a frequent contributor to We Got Served. When Jim first heard about Windows Home Server, he developed an immediate interest in this new platform as a centralized storage product for the home. We Got Served became an outlet to document his experiences with this Microsoft product, review software written specifically for the Windows Home Server platform, and review hardware related products for use in the digital home. His interest in Windows Home Server and the digital home continues to this day.

Jim was born and raised in Marion, Iowa. Except for short stints in Cedar Rapids and Waterloo, Iowa, he has remained true to Marion. All four of his children have graduated from the same high school he went to. Jim has a degree in Mechanical Engineering from the University of Iowa and has spent his entire career in various design engineering positions in the manufacturing industry.

Jim's interest in computer technology started with the original IBM PC. PCs have been an integral tool at work, and a hobby for over 25 years. Jim has been awarded Microsoft's Most Valuable Professional Award for Windows Home Server each year since 2009 for his work with Terry on the We Got Served website.

Jim is the co-author of Windows Home Server 2011 Step by Step. This is his second book.

You can contact Jim at jim@wegotserved.com

About We Got Served

We Got Served is a popular technology news and community site which was founded in February 2007. It is written, edited and moderated by a dedicated and knowledgeable team of technology enthusiasts across the world who are focused on bringing you the latest news, reviews, tutorials and support for the products you're using today and tomorrow. We created We Got Served as a place to learn about new technology, help readers make the most of the products and services they use, and most importantly to create a community where readers can learn, discuss and share their experiences and knowledge with others in need of support. However you use the site, I hope you enjoy it.

About this Book

When Jim and I hatched a plan to write Windows Home Server 2011 Step by Step, we knew we were taking a risk. After all, the press and the home server community at large had not taken the platform to their hearts, stung by the deprecation of Drive Extender. The product itself was almost a year old (older if you ran the beta) and OEMs weren't jumping in with hardware support. The question was, does anyone still love Windows Home Server enough to buy a book about it?

But, you know, what the heck - there's always been a bit of pioneer spirit knocking around We Got Served, so we thought we'd write it anyway. It would only be our time we'd burn... we were surprised by the result.

Okay, let's put that into perspective - no-one's going to be doing a national or international book tour and gracing the speaker's circuit with a guide to Windows Home Server. Dan Brown, you need not feel threatened. But enough people jumped on board and provided the feedback we needed to know that there are still a great deal of people that care about Windows Home Server and want to do more with it.

If you're one of those people, then thanks for buying the book (and this one too, I hope!). This one's for you. But not just you...

Having been at the heart of the home server community for the last five years, we know there's still a lot of love out there for Windows Home Server v1, and all of its Drive Extender goodness. There's many who have steadfastly refused to upgrade to Windows Home Server 2011, and have stayed true to their word. Inevitably, development focus and press coverage has moved away from that platform, and (I'll say this quietly so to not offend) whilst you may love your v1 home server dearly, maybe the spark in your relationship is a little less bright than it once was?

Then consider this book as the literary equivalent of a pair of sexy undies and one too many beverages, as we seek to help you fall in love with Windows Home Server all over again with 25 excellent tech projects - whether you're old school or new school, we turn no-one away. We'll cover media management, metadata management, advanced remote access, uploading, downloading, streaming, ripping, sharing, building, recording, tagging and a whole lot more!

It's always dangerous making assumptions about your readers, as you'll always get it wrong. But let's live on the edge! In writing this book, I will assume that you've had some experience with Windows Home Server, and have mastered many of the basics. If you're completely new to Windows Home Server, then grab our beginners guide to the world of WHS 2011 (Windows Home Server

2011 Step by Step) at http://store.wegotserved.com/products/windows-home-server-2011-step-by-step and flick through that first. As you now have some experience, we won't screenshot every step these walkthroughs require, but would ask that you have an understanding of some of the usual tasks like installing an add-in on the server, connecting to the server via a remote desktop connection and so on. That stuff is covered in Step by Step, so if I've just thrown you, head to the store and grab that book first. That said, we've tried to make each project as comprehensive as possible, so you shouldn't get lost along the way - if you do, then hit WGS Forums (http://forum.wegotserved.com) for access to over 70,000 experts and home server know-it-alls.

If you've never wandered outside the Windows Home Server Console/Dashboard (see we're bilingual!) then you're in for a treat - if you're a seasoned pro, then I hope we'll extend your expertise with a few tricks of our own. Whoever you are, I hope we'll have some fun and arm you with the goods to continue to amaze your family and friends with the cool stuff you can do with Windows Home Server. Let's go!

Terry Walsh

February 2012

Register This Book

Whilst the concept of registering a book may sound a little strange, I heartily invite you to do so! Registering your email with us allows us to inform you of updates and amendments to the book, and let you know about new books we're writing as well as some offers on our other titles.

Hey, if that's not enough, you know us so we'd like to know you too!

So head over to **http://eepurl.com/kZUcH** and spend 23.2 seconds signing up!

If You Need Some Help...

Windows Home Server is pretty simple to get to grips with, but it does have the odd quirk. If you run into trouble and need a hand, then We Got Served has a fabulous user community of over 95,000 Windows Home Server users ready and willing to lend a hand.

Come over and join us at **http://forum.wegotserved.com - look forward to seeing you there!**

Revision History

v1.0 March 2012

Initial release

v1.0.1 April 2012

Fixed Chapter 14 Header

v1.1 September 2013

Design Refresh and Corrected Table of Contents for Kindle

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Chapter 1

Run an Application as a Service

Run an Application as a Service

"We start the book with a project that at first glance may not seem like the coolest thing you can do with a home server, and that's probably a fair assessment. But you'll find the ability to run an application as a service massively useful in your continuing Windows Home Server adventures, and you'll find it popping up regularly in chapters throughout the book. So we're going to cover it off first!"

One thing to remember about a Windows Home Server v1 or 2011 computer is that it is a server. It may be designed for the home user, but it is still a server. Once set up and running, it is a computer that you make use of; not use directly. The only time you really need to normally access it is to perform routine maintenance functions. Even then, you will most likely be using the WHS v1 Console or the WHS 2011 Dashboard for maintenance.

Very rarely will you need to actually log-on to the machine, either directly or in a Remote Desktop Connection.

Occasionally, you may need to install a program that normally requires a user to logon to the machine for it to run. You may need to have this program start when the machine boots and not wait for a user to logon to the computer. This is what can be termed as running an application as a service. Services are not affected by users logging on or off.

So, it comes down to how do you do get a program that is not installed as a service to behave like one? We will show you two methods, one we will term the "hard-wired" method and one we will term the "soft-wired" method.

For Windows Home Server v1 and 2011

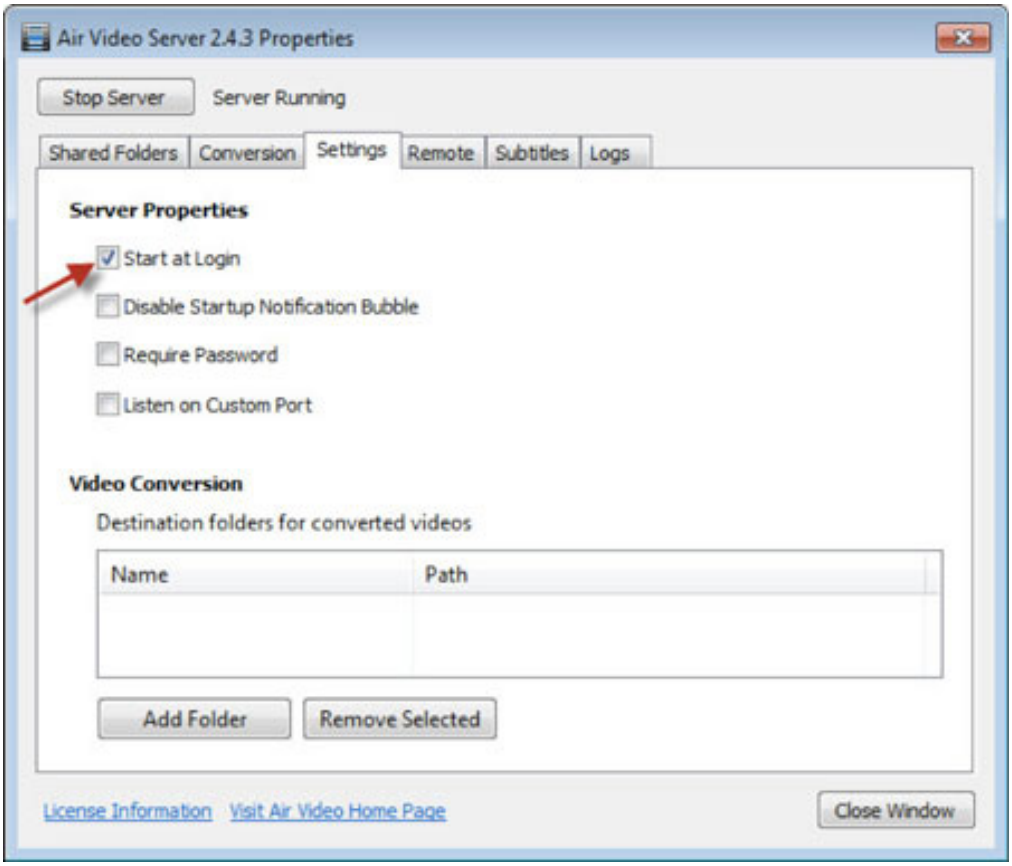
Install Your Application

Before doing anything else, you will need to log on to your home server to install the program you

wish to turn into a service. You can log on directly to the machine, or via a Remote Desktop Connection. Install that program as you would any other.

For this example, we have installed an application called **Air Video Server** (an app which pushed video from the server to devices like Apple's iPad) and will be setting this program up as a service. Once this application has installed, we need to open the program to uncheck a program setting that has the program start up when a user logs on to the machine. Different applications have numerous ways of achieving this, (and we can't cover them all, obviously) but you'll generally find these kind of settings in the application's Preferences menu.

So, In the Air Video Server program window below, we will need to uncheck the **Start at Login** option.



If the application already starts as a service at boot, we don't need it to start (again) at login, right?

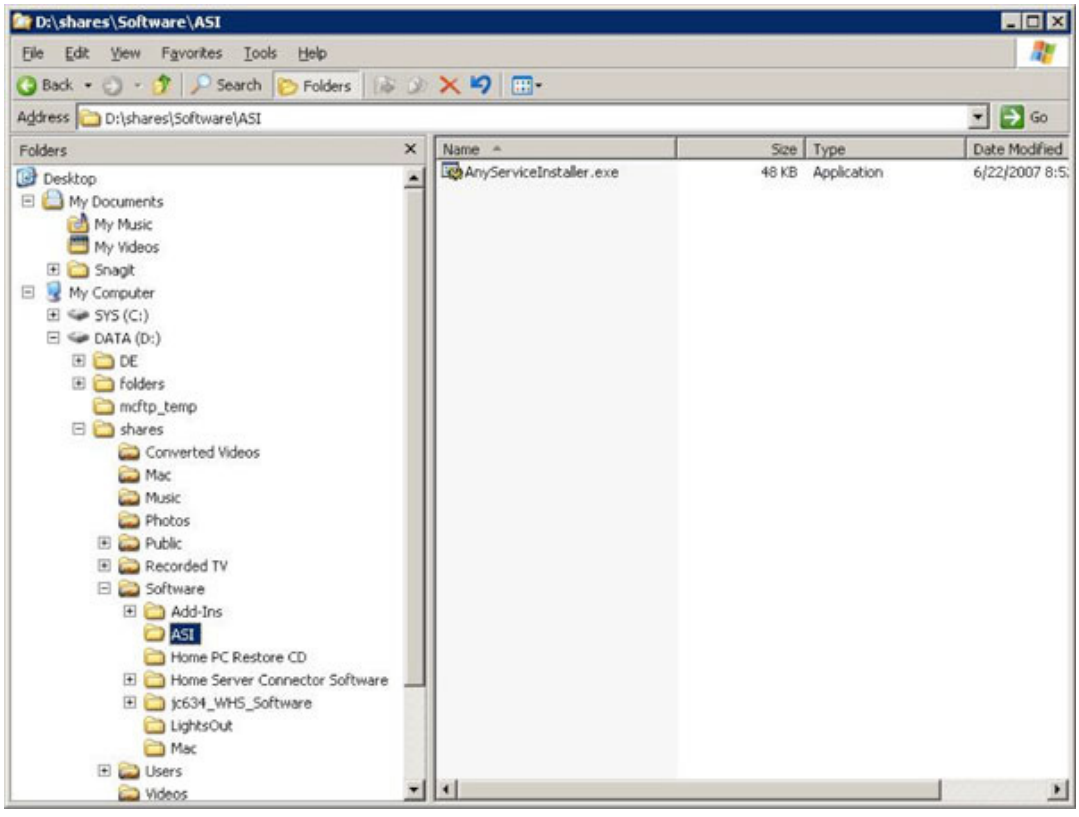
Configure Your Application to Run as a Service

Windows Home Server v1 Users

To install an application as a service in WHS v1, we will present what we call the "hard-wired" method, which is a utility called **Any Service Installer**. This program was created by Marcel Nouwens to, as you may have guessed, set up an application as a service. You can grab it here: http://www.wegotserved.com/2009/04/12/any-service-installer/. To use this program (note that it is not a Windows Home Server add-in, but a regular application), you will need to log in directly to the machine, or via a Remote Desktop Connection.

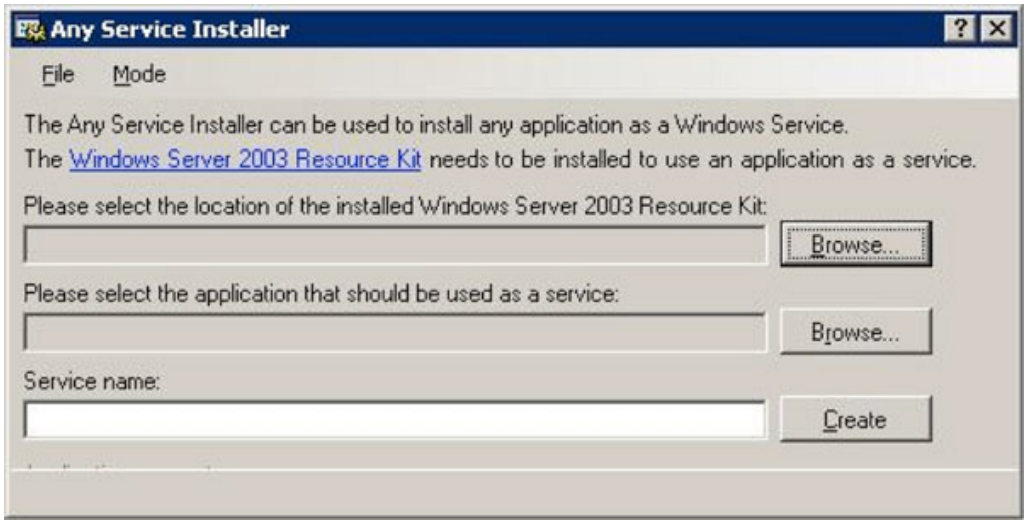
Prior to actually using Any Service Installer, you will need to first download and install the Windows Server 2003 Resource Kit. You can grab it here: http://www.microsoft.com/download/en/details.aspx?displaylang=en&id=17657.

Once this kit has been installed, you will need to locate, unzip, and run Any Service Installer.



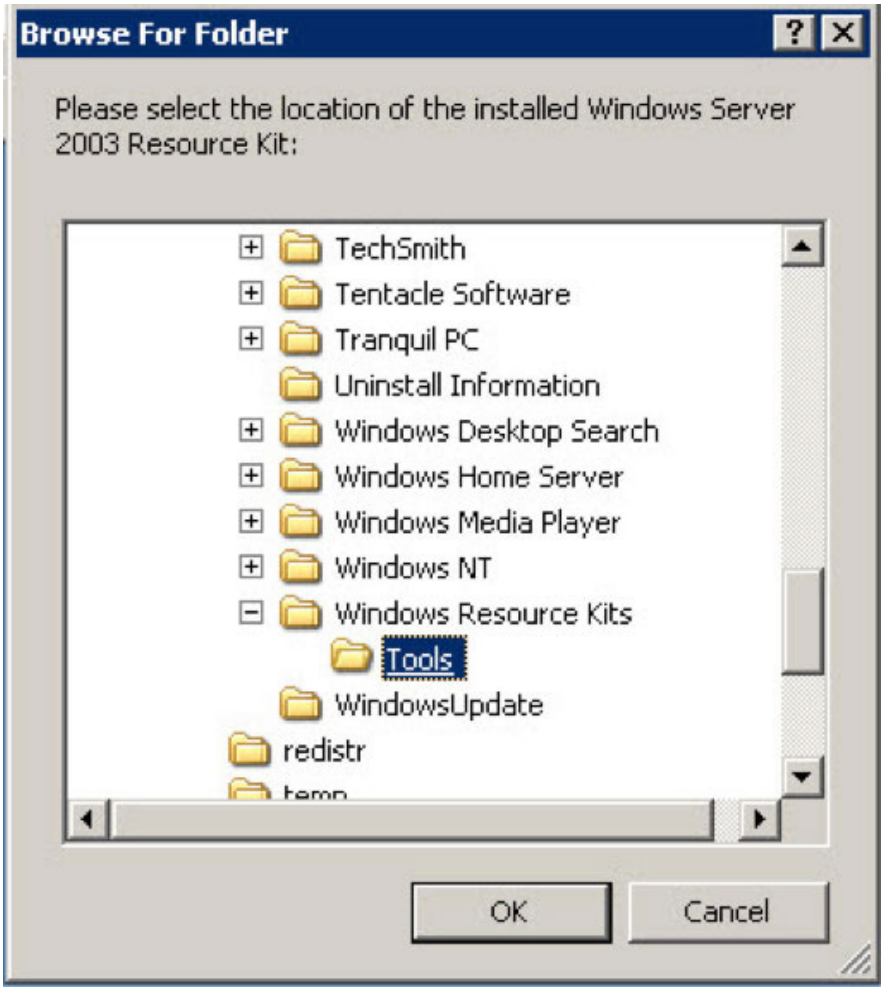
Any Service Installer is packaged as an executable file. Double click to run.

The program opens with a dialog in which you simply fill in the blanks as required.



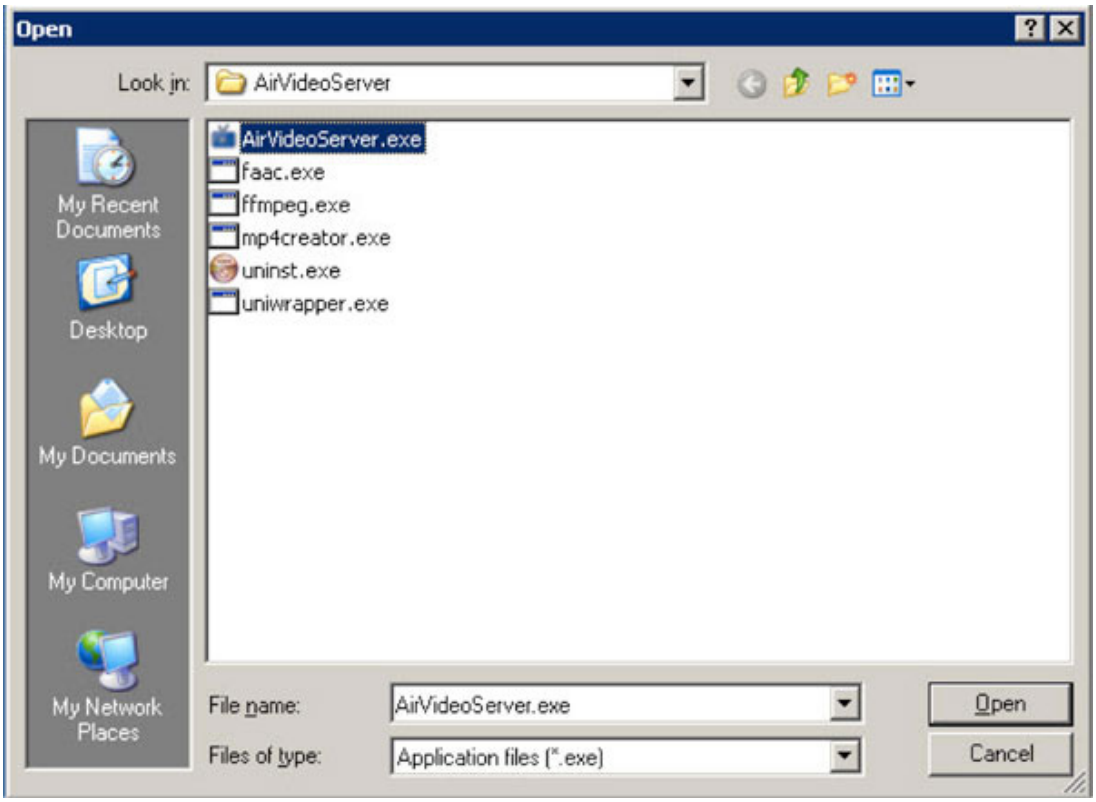
Simply drop in the links via the Browse button to create your service.

That is the simple mode; there is also an Advanced mode, which we get back to in a moment. But let's walk through an example. The first item of business is to click on the first **Browse** button (above picture) and locate the **Windows Server 2003 Resource Kit** folder. Locate and click **OK**.



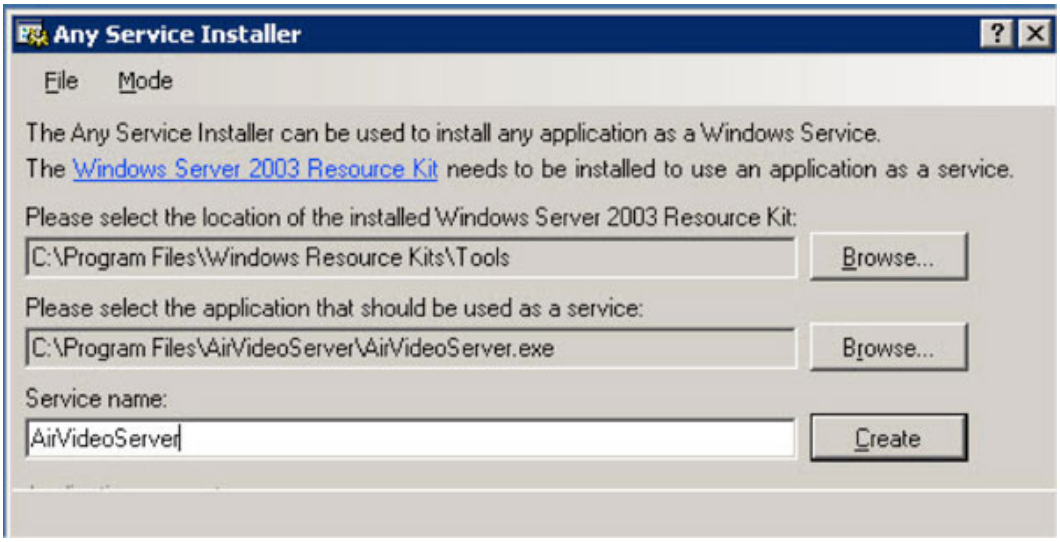
Finding the Windows Resource Kit folder.

Next, you will need to click on the second **Browse** button and locate the program you wish to set up as a service. Highlight it and click **Open**.



Find your application's .exe file.

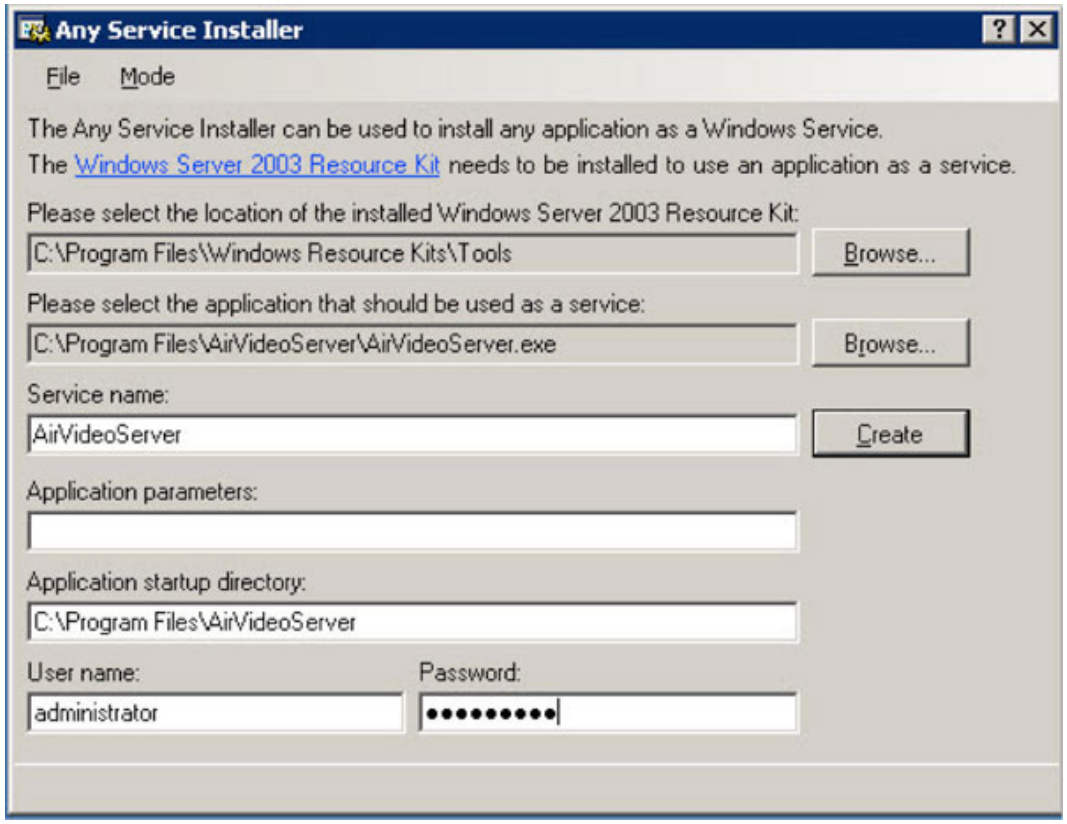
Finally (almost), you will need to give the service as name, as shown below. Do not click on **Create** yet!



Name your service.

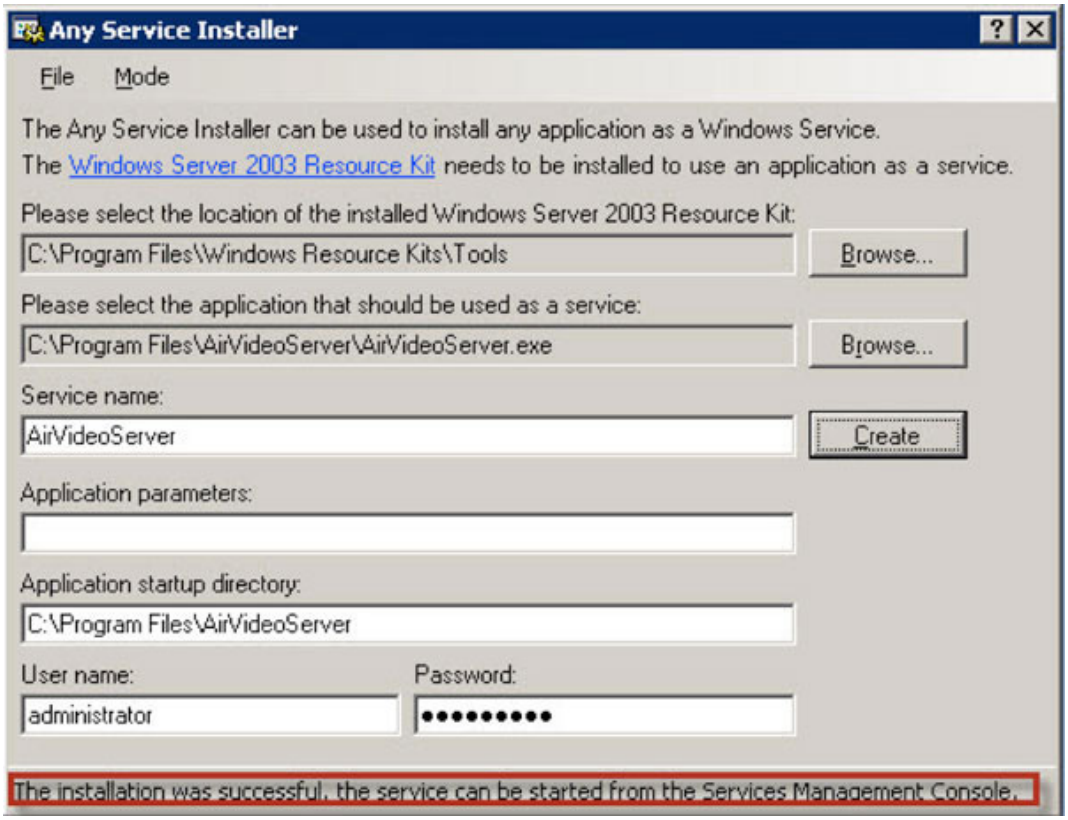
I said almost, as we will now need to go into the **Advanced Mode** and fill in a few more blanks. Head up to the **Mode** menu and check **Advanced** - your Any Service Installer dialog should grow.

When Air Video Server is first installed, it is set up to start in the Air Video Server Folder, so fill in the **Application startup directory** as indicated below. We also need to fill in the **User name** and associated **Password** to give it the rights needed to load on startup. If your application has any command line parameters required to be passed during startup, you can add them to the mix too.



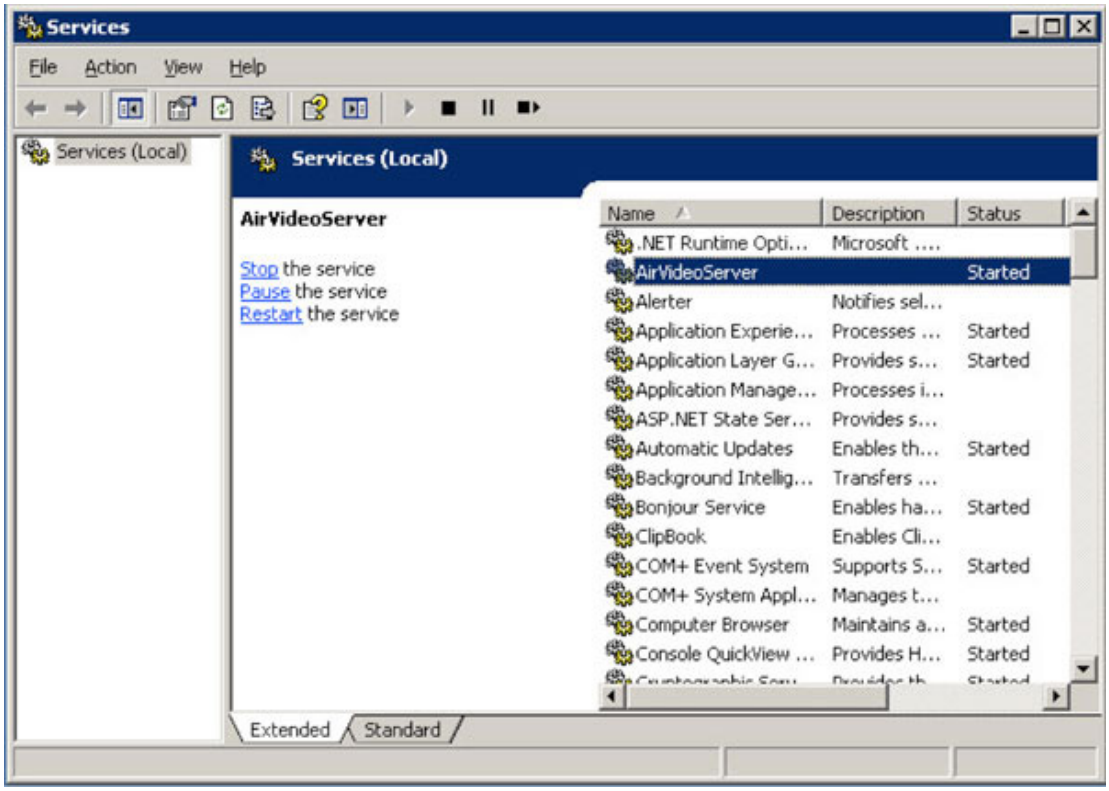
The Advanced Any Service Installer menu.

We are now ready to click on the **Create** button, which gives us the following message that we have succeeded.



Success!

Once you restart the computer, you can open the **Services** console and verify that the Air Video Server program is indeed running as a service:

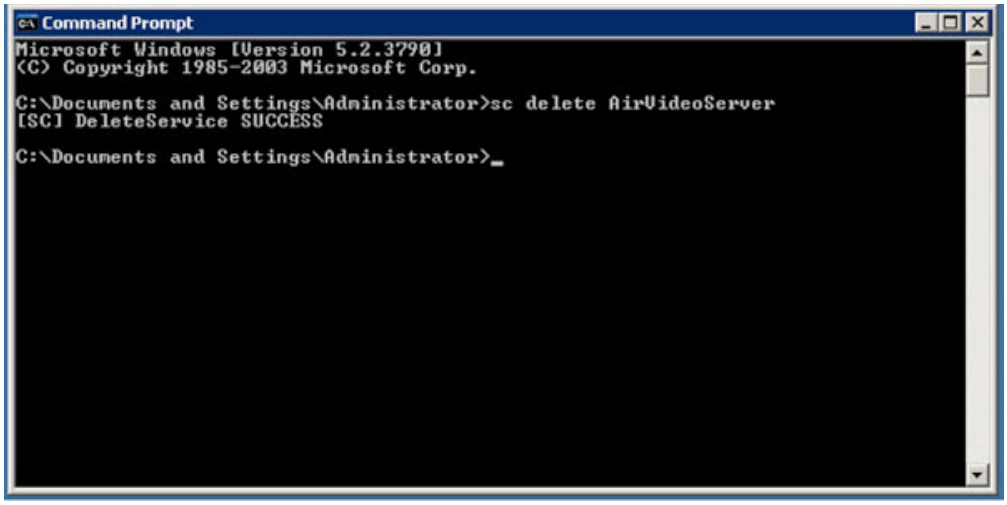


Our chosen app, now running as a service.

You are done! If you decide at a later point that you want to remove this "service", you will need to open a **Command Prompt** window, type in the following command:

```
sc delete <ServiceName>
```

where <ServiceName> is the actual name of the service, and press **Enter**. The program is still installed, but is no longer a service.



Removing the service from the command line.

Windows Home Server 2011

To install a program as a service in WHS 2011, we will present what we call the "soft-wired" method. Please note that you can also use this method on a WHS v1 machine, if you so desire.

To transform Air Video Server into a service using this method, we need to access **Task Scheduler**.

The easiest way to get there is to install a WHS 2011 add-in called **RemoteLauncher** (http://forum.wegotserved.com/index.php/files/file/233-remote-launcher/). The current version has a direct link to Task Scheduler, as noted below. Double-click on it to open the app.