



Step 1

Welcome to WDSC!

And welcome to *WDSC: Step by Step*.

About the time this book goes to editing, the next version of WebSphere Development Studio Client for iSeries (WDSC) will be getting ready for release. The biggest additions to Version 5.1.2 are new support for JavaServer Faces and the integration of Enterprise Generation Language (EGL), a feature borrowed from WebSphere Studio Enterprise Developer. You'll also see enhancements to the various Web-enablement tools, such as WebFacing and HATS. I consider most of these to be "advanced" features, dealing specifically with the integration of Web applications and legacy systems. As with any other release, there are minor changes to the UI as well. Wherever changes have been made to the tool, I'll address them in the text. I have also included a complete addendum on the CD-ROM that includes screen shots for areas that have changed. SideStep 5 of the book addresses this addendum in detail.

But WDSC is much more than that. WDSC is like an amalgam of all the tools required to build a great application, from Web site design to application deployment. Combine FrontPage and Dreamweaver, mix in VisualAge for Java, and add a dash of Paint Shop Pro, and you begin to get an idea of the capabilities that WDSC brings to the table. Include on top of that the unique capabilities of the built-in CSS and XML editors, the ability to syntax check Java code within a JavaServer Page (JSP), and the flexibility of the template language, and you've got more than a Web site designer; you've got a Web application development environment that allows you to build all of your pieces in one coherent environment.

If that weren't enough already, you then add the unique testing and deployment capabilities of WDSC—from integrated JUnit testing to the WebSphere Test Environment, from hot deployment to WAR/EAR creation—and now you've got an unsurpassed Web development environment.

But that's only what WDSC brings to the table itself. WDSC is built on the Eclipse platform, so it's also able to include all of the great Eclipse plug-ins currently available—things ranging from high-end UML editors to SQL tools to editors for other languages.

So how can one book possibly teach you all of that? Well, it can't. What a book can do, though, is guide you through every step needed to create a dynamic, data-oriented Web site and make you comfortable and productive using the tool. For green-screen programmers especially, that means being able to use WDSC in place of the old green-screen and being introduced to the brave new world of GUIs and browsers.

Prerequisites

In order to do all this, there are a few prerequisites. Most importantly, you need to have WDSC installed on your machine. During the installation, you must also install the WebSphere Test Environment. So the machine needs to be a good-sized machine. These are the minimum requirements to run a full-blown WDSC session (including the WebSphere Test Environment):

1. A CPU of 2GHz or better
2. 1GB of RAM
3. 2GB of disk space
4. 1024×768 screen resolution *highly* recommended
5. Windows 2000 or better for Windows machines

That might look like a hefty machine, but if you plan to do development using today's generation of tools, that's a minimum (technically, you may squeak by on half the RAM and a slightly slower CPU, but you'll occasionally be dissatisfied with response times). Personally, I find that 1280×1024 is necessary if I plan to use the tools on a daily basis, but the specs I posted above are enough to get started.

With some judicious shopping on the Internet, you can find a machine with those specifications for under \$1,000 US. It could be a little more if you go with a flat-screen monitor, which I find indispensable, but I write for a living.

As I said, you'll need to have WDCS installed on your machine, including the WebSphere Test Environment. That's where the 2GB of disk space goes. Not only that, you need to have everything up-to-date. As of this writing, the latest version of WDCS is Version 5.1.0.3. If you aren't quite sure how to upgrade WDCS, don't worry about it; I was confused, too. However, SideStep 1 provides documentation on the upgrade process.

For the client/server development, you'll need the following:

1. An iSeries at V5R1M0 or later
2. A value in your HOSTS file that points to the machine (the book assumes a name of WDSCHOST)
3. A user profile on the iSeries (the book assumes a name of WDCUSER with a password of WDCUSER) that is authorized to
 - a. CRTLIB
 - b. STRSRVJOB, ENDSRVJOB, STRDBG, ENDDBG
 - c. The program Q5BATTACH in QSYS

Please note that these requirements are only necessary for the client/server portions of the book, starting at Step 11. Prior to that step, you don't even need to be connected to an iSeries; you can do all your development and testing right on your workstation.

Since a prerequisite is that you have already installed WDCS, I am going to assume that you have tried to load it. When you do load it, you get the following dialog:

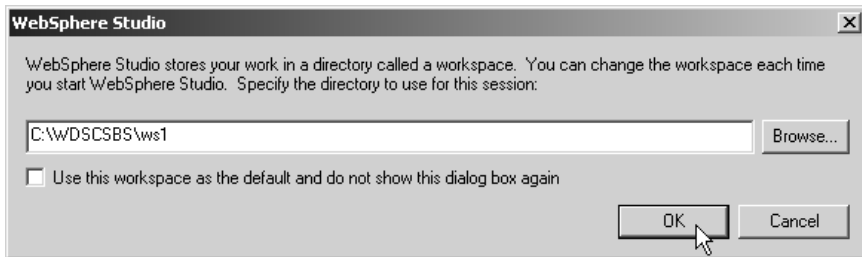


Figure 1-1: This is the startup dialog for WDSC.

I highly recommend the above setting. It will create a folder in your hard drive root called WDSCSBS, and then it will create a workspace called “ws1” within that folder (a workspace is just a hierarchy of folders). I suggest this because if you choose to use Checkpoints later, you want to know exactly where to copy those Checkpoints to, and if you follow the suggestion, you will always copy them to C:\WDSCSBS. (If you don’t have enough room on your C: drive, substitute another drive letter, but still add WDSCSBS to the root.)

Warning: Do *not* check the “Use this workspace as the default...” box. If you do, you’ll have a hard time using different workspaces, and the ability to use different workspaces is one of the key productivity features of WDSC. It’s also a requirement for the Checkpoint capabilities of this book.

Note: If you do *not* get the above dialog, that means you’ve already started WDSC at some point in the past and checked the box “Use this workspace as the default...”. Because of this, WDSC will not show the workspace prompt again. In order to re-enable this prompt, you must change the Windows Registry. This is not a simple process, nor is it recommended for those who are not Windows experts. However, without this change, it is difficult to use different workspaces, which I believe is a key to using WDSC. So, I highly recommend that you get the key changed; either do it yourself or have someone knowledgeable in Windows help you out. This is the key to change: HKEY_CURRENT_USER\Software\IBM\WebSphere Studio\Workspace. In that key, you should see several values. One will be named wdsc510_status or wdscadv510_status, depending on whether you have WDSC Standard Edition or WDSC Advanced Edition installed. The data for this key will be Disable. If you change this value to Enable, the next time you start WDSC, you will see the prompt in Figure 1-1.

How It Works

The *Step by Step* books are very simple in format. The entire book is broken down into a series of sequential steps that are meant to be followed in order. Each Step will have a checklist. The checklist will look something like this:

- ❑ **1.1(a) Place toothpaste on the toothbrush.**
- ❑ **1.1(b) Brush teeth vigorously for two minutes.**


The number on the left refers to the Step (1.1, 1.2, 2.1...) and the task within that step (a, b, c...). The number on the right refers to the page where that particular task can be found.

Step 1.1 – Brushing Your Teeth

Goal: In this step, you will brush your teeth.

NOTE: If you have dentures, please use the dentures SideStep.

— 1.1(a) Place toothpaste on the toothbrush



A black and white illustration showing a hand squeezing a tube of toothpaste onto the bristles of a toothbrush. The toothpaste is being dispensed from the tube onto the brush head. The hand is shown from the side, with the thumb and index finger gripping the tube. The toothbrush is positioned horizontally, with the head pointing to the left. The illustration is simple and uses bold lines and shading to show the action.

Figure 1-1: Putting toothpaste on the toothbrush.

Each Step will start on a new page and will have a heading and a goal statement. There may be a paragraph or two of additional information as well. Each task will have detailed instructions and one or more associated illustrations (occasionally, several tasks will refer to the same image—for example, when you're being instructed how to fill out the fields of a dialog box).