

Configuring SELPA Manager for the Web

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Here is a simplified set of instructions for getting started with SELPA Manager web serving.

1. Licensing. If you haven't already obtained one, purchase the **4D Server 2003 Web Extension license** (store.4ddepot.com -> 4th Dimension Deployment tab).

The site allows the user to enter a credit card for the purchase and returns a product ID; enter the product ID under 4d.com/register to obtain the serial number. Enter the serial number on the server as an extension license (Help -> Update license).

The web extension license allows an unlimited number of web users to connect, so the server is limited only by its own capacity (hardware, software, and network connectivity) to handle the traffic.

If you do not have a web extension license installed on 4D Server, then the web server can run in demonstration mode for up to an hour. After that time, web users attempting to connect will receive a message indicating that the demonstration time limit has expired. The 4D Server application will then need to be re-started before another web demonstration period can be established.

2. Preliminary steps on the server.

2.1. Ensure that the server has a fixed IP address. This step enables program users on the web to connect to SELPA Manager, by typing the IP address into their web browser's location box.

You may wish for web users to enter the computer's domain name, if available, or to click on a link on the department's home page, which links to the server IP address.

2.2 For a Windows 4D Server computer, ensure that the **World Wide Web Publishing service** is set to a Manual startup type, and is currently stopped (Control panels -> Administrative Tools -> Services -> World Wide Web Publishing).

2.3 With 4D Server running, on the server computer, look in Edit (menu) -> Preferences -> Client/Server -> Client/Server Communication. Ensure that "Register Clients at Startup for Execute on Client" is NOT checked. This item is not set by default.

If this item is checked in server preferences, then every 4D Client that connects to 4D Server will be registered as a web print server for SELPA Manager. This situation will bypass the coding checks which ensure that 4D Client has the correct default print driver selected, prior to activating the print-to-pdf function (refer to Step 4.4, below).

3. Start web serving on 4D Server by selecting Web server -> Start web server.

Note that you must re-start the web server each time that you re-start 4D Server itself, unless you select (on 4D Server) Edit menu -> Preferences -> Web (Server) -> Publishing -> Publish Database at Startup.

Even if you select this start-up option, you must still manually re-start the 4D Client that is running the print-to-pdf function (refer to Step 4, below).

4. Configure at least one copy of 4D Client to be a print-to-pdf workstation.

4.1 pdf print driver. For a Windows workstation, you will need the print driver, **Win2pdf Standard Edition**, \$35, at win2pdf.com. For a Windows server, you will need **Win2pdf Terminal Server Edition** (\$499).

For **Macintosh**, pdf printing is built into OS X. A **Mac Mini** (\$599) makes a great, reliable print server.

The 4D Client performing the print-to-pdf function can reside on the same computer as the 4DServer.exe, if the server has sufficient RAM and disk speed -- preferably a dual-processor model with a striped-type RAID. Otherwise, another workstation can be used for the print-to-pdf function.

4.2 For a Windows 4D Client used in print-to-pdf service, open the 4DClient.exe copy with **4D Customizer** (a utility installed on the server with the base server installation, C:/Program Files/Fusn_tek/4D Customizer 2003). Reset the stack memory from a default of 64K to 768 K). Save and exit from 4D Customizer.

4.3 To start the print-to-pdf service on a Windows 4D Client, the win2pdf must be the **default printer** in Windows prior to starting 4D Client (Start menu -> Printers and Faxes -> right-click on the Win2pdf driver -> Set as Default Printer).

4.4 With both 4D Server and 4D Client running, on 4D Client select **File -> Start web services**, and press OK on the dialog that appears on the screen.

4.5 High print volume considerations. If there is a high volume of web printing requests, you can have more than one print-to-pdf workstation, and the 4D Server will send jobs sequentially to the workstation with the shortest queue.

You must ensure that the network connection from 4D Server to 4D Client is very reliable. Connections with a high latency (approx. 80 ms or above) won't work. See the related article, *Diagnosing 4D Client - 4D Server Connectivity Problems, a brief primer* (www.ladue.com/Documentation/Diagnosing_4DClient-Server_pbms.pdf)

5.0 Web user workstation requirements.

Suggested browsers are Firefox, Internet Explorer, and Safari. The web browser should have JavaScript enabled, to access the goals and objectives palette and certain other features of the web interface.

Each workstation that wishes to receive print jobs from the server should have Adobe Reader, Preview, or some other PDF-reading application installed, preferably with a web browser plug-in so that the job appears in the same browser window.

6. Preferences for web use (4D Client). Open a copy of 4D Client as administrator.

6.1. Select the IEP form set to be used on the web. Go to File -> Preferences -> Web and multi-user -> IEP -> "Form to use for new IEPs on web (if different)". Select an IEP form set to be

used when creating new IEPs on the web. You should have at least four to choose from (DFLT, DFL2, DFL3, DFL4), and possibly more if your SELPA has custom IEP forms.

6.2. Select maximum number of rows to list on the “home” page. On the same preference page as in Step 6.1, select (as a starting point) a setting of 5 for the “Max to list on home pg (web)”. This specification is for the number of students and/or IEPs to be listed at a time, before paging to a new subset of the selection in each list.

6.3. Select idle disconnect time. On the same preference page as in Step 6.1, in the Multi-user subsection at the lower-middle portion of the dialog, you may wish to limit the amount of time that web users can remain connected to the server in the absence of any activity on their part (“Time out idle web connections after ___ minutes”).

If this item is set to 0 minutes, then the web server defaults to a one-day timeout (1440 minutes). It is recommended that you select a lower value, perhaps 120 minutes (2 hours). If you set the value to be less than 120 minutes, then users should be aware that they should save their work before breaking for lunch. Otherwise, they may return to find that they have been logged out.

7. Establishing web login accounts.

Each user who wishes to connect over the web will need to be listed with a user name and password, in the Passwords dialog (File menu -> Users and Groups -> Passwords dialog). Each service provider should be in either the TeacherLtdGrp or CounselorLtdGrp access group. If a user belongs to the read-only access group, they s/he will be unable to connect over the web.

For teachers and other service providers, the login name must exactly match the teacher’s name in the Staff section of the program. Otherwise, the teacher will be unable to access his/her students over the web.

You can configure a number of staff members as a batch, for web login without manually re-typing their names. In 4D Client, select the staff members so that they are listed in the Staff browse list. With *only* these names listed in the staff browse, type “**create login accounts**” in the Location box. The program will automatically create the login accounts with an initial password of “iep”. Note: This Location box command works only with administrative access.

8. Test web access from a web browser.

8.1 To access the SELPA Manager web “home” page on your server, enter the server IP address or domain name in your web browser. You will be prompted to enter both your name and password. The administrator can log in with his/her admin. account.

8.2 Try creating a new IEP for an existing student, by finding a student name in the upper (blue) list. Select the name in the first column (radio button), and then press the “Create IEP for this student” button. On the first page of the new IEP, select “Print IEP pages” to test the print-to-pdf function. Use the back arrow (once),

9. Remote 4D Server management (Windows, Remote Desktop)

If you are using **Windows 2003 Server** as the platform for 4D Server and/or 4D Client, and wish to start/stop or otherwise manage the SELPA Manager Server or print-to-pdf function remotely,

then you will need to use the “**console**” option to access the local desktop on the computer. You will also need to use the **local administrator’s login account** for the server.

If you do not use the console option, then you will not “see” 4D Server running when you remote into the server. Quit from Remote Desktop. If you connected in this fashion, do **not** re-start the server remotely, or you will cause an unexpected termination of the 4D Server and/or the 4D Client application, possibly impacting the data file integrity.

If you did not use the local administrator’s login account (the same account that is running on the local console), then Windows will offer to terminate the local console session so that you can take possession of it. Do **not** accept this option. Instead, you should log in with the local administrator’s account.

To use the console option, you will need to start Remote Desktop from the command line (Start menu -> Run). The command string is,

mstsc -v:192.168.1.167 /F -console

...where you substitute your actual server IP address for the “192.168.1.167”