#### Microserver An Overview



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The eightolives Microserver implements a simple, GUI-driven, web server on your PC.

You can:

- Run a personal web server on your PC
- Open read access to documents in the "public" folder
- Password protected access to files in "project" folders
- Support normal http and secure https protocols
- Add and manage users using simple dialogs
- Limit access to your local "intranet" or allow external "Internet" access based on external firewall settings

# eightolives.com What do I use it for?

- You use Microserver to serve HTML web pages, pdf files, images, media and other documents.
  - For example, this tool lets you access your documents or mp3 files remotely from your iPod
- Password protected "project" directories can only be accessed by users to whom you assign certain privileges

# eightolives.com Log In to Download Microserver



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Start at http://www.eightolives.com/index.htm and select Microserver in left margin.

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## eightolives.com Installation occurs on first startup

- Microserver will prompt you to select a directory in which to put your files
- It then automatically installs the structure:

eo\_microserver

users.xml - the file that contains user information on those who can access projects

mime\_types.xml - a file that describes the type of data being sent based on filename suffix

public - the directory structure for public documents

public/docs - subdirectory for documents accessible by anyone who can connect to your computer

index.htm – default Home Page accessible by anyone who can connect to your computer

projects - the directory of restricted, password-protected projects

projects/demo - default demonstration project directory

projects/demo/upload – subdirectory to which project users with WRITE privileges can store files

index.htm – default Home Page accessible by project users who have READ access privileges Copyright © 2010 William Kaupinis All Rights Reserved

### eightolives.com Microserver display has a Tool Area and a Status Area



- Click Home icon to view your Home Page
- The Microserver window starts with a simple web browser in the upper panel.
- Server status is reported in the lower panel.

Status Area shows a log of activity.

## eightolives.com Menu Option Tools > Edit Users

🧝 eightolives	microserver: loc	alhost/127.0.0.1			
File Tools Pref	ferences Help				_
🔲 User Window	v				M
File Operation	s Holn				
home	5 Help	Desquerd	Droject	Dormission	
quest	Email	9010394125	demo	4	
guest		5010551125	acino		
Esta Llass Data					
Edit User Data					
This address = loc	alhost/127.0.0.1	norts : 8080-80	81		
nino addrebb = loe		., porto : 0000,00	01		

- The User Window shows all users that can access project directories.
- Operations include Add a User, Edit a User and Delete a User

## eightolives.com Easy to Add or Edit User data



### **eightolives.com** Web browsers will prompt you for access to Project directories

🤣 P	rompt 🗖 🗠 🗖
?	Enter username and password for "Project Access" at https://127.0.0.1:8081 User Name:
	Password:
	OK Cancel

To access the demonstration project included as a default, set your web browser to; http://127.0.0.1:8080/projects/demo/index.htm

At the prompt, enter: User Name: guest Password: guest123

Passwords must be at least 8 characters in length.

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## **eightolives.com** Standard Mime Types Are Predefined

Mime Types relate the data type with filename suffixes.

You can easily add or edit others if necessary.

2	eightolives microser	ver: localhost/127.0.0.1	- 🗆 ×	
File	e Tools Preferences	Help		
				[
	Mime Type Window	□ □ ⊠	- d X	🔁   111   💠 🔍 🖬 🥑 🕊 🕯
	File Operations Help			
	Type	Suffix 🔺		Sorter
t	ext/html	.htm,.html,		
t	ext/plain	.txt, .java, .csv, .vhd,		
t	ext/css	.CSS, 💻	eightolives.com	e
ļ	mage/jpeg	.jpg, .jpeg,		
	mage/gif 🔍 Add	New Entry		
	udio/midi			
	application/x	Type:		
	pplication/o			
a	pplication/p			
2	application/x			
		Suffix		
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This	address =			
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9	3			
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	l l l			
	No			
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### **eightolives.com** The Built-In Simple Browser Lets You View the HTML Code in a Text Editor

This feature lets you edit and save the HTML code easily.

Template web pages can be selected from the eightolives site and then saved to your web server directory.

🧝 eightolives microserver: localhost/127.0.0.1 — 🗖 🗙
File Tools Preferences Help
🗖 http://127.0.0.1:8080/index.htm 🛛 🗗 🗹 🔟
File Edi Preferer       Fine       Hel         "http://www.w3.org/TR/html4/loose.dtd">       microserver home page on <html xmlns="http://www.w3.org/1999/xhtml"> </html>
http://127.0.0.1:8080/index.htm
This address = localhost/127.0.0.1, ports : 8080,8081 connecting to: /127.0.0.1:54108GET /index.htm HTTP/1.1 Request is index.htm connecting to: /127.0.0.1:54109GET /index.htm HTTP/1.1 Request is index.htm
connecting to: /127.0.0.1:54109

# eightolives.com Two Protocols Are Supported

#### HTTP

• The typical protocol used on the Internet

#### HTTPS

• The standard secure protocol used on the Internet

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### Microserver *Does Not* Default to Standard IP Ports

- The standard IP ports require Microserver to be run with administrative privileges
  - Http traffic on port 80
  - Https traffic on port 443
  - You *can* select to use these ports if you wish via the Preferences Menu and then restarting
- The default IP ports used by Microserver only require user privileges to run
  - Http traffic on port 8080
  - Https traffic on port 8081

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Preferences are saved when you exit.

# URLs

- URLs to your server must specify an IP number
- When you use non-standard ports, URLs must also specify the port number
- Examples:
  - http://127.0.0.1:8080/index.htm Your Home Page
  - https://127.0.0.1:8081/projects/demo/index.htm
     the Home Page of the demonstration project

### Several IP Numbers May Connect to Your Server

- IP numbers have the format xxx.yyy.uuu.zzz
- 127.0.0.1 is the loopback IP address you can use to access your web pages without using the external network
- If you connect to the Internet through a router, an internal network IP address such as 192.168.0.18 allows computers on the internal network to access your computer
  - On a command line, run ipconfig (Windows), ifconfig (Linux) or netstat to determine your internal IP address
  - URL to your home page would be: http://192.168.0.18:8080/index.htm

## eightolives.com **Internet Presence**

- Your router has a global Internet IP address
  - Computers on the Internet can access your computer if your router is configured for Port Forwarding
    - Refer to your router's instructions or administrator on port forwarding
    - A home router's setup page is sometimes accessed as http://192.168.0.1/
- The eightolives Connect Me page provides links to your global IP address (port 80 typically your router) and to port 8080 to access your computer via port forwarding. Connect Me is accessible from the eightolives home page: http://www.eightolives.com/.

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# Hints

- The home page of any directory should be called *index.htm*
- IP numbers are often assigned dynamically meaning they can change each time your power up your computer or router.

# eightolives.com For more information

- Check the tutorials at: http://www.eightolives.com/tutorials.htm
- Review bug reports and status from the Microserver home page at: http://www.eightolives.com/docs/Microserver/index.htm