

OpenSUSE simple web page and simple web server.

The presentation creates a very simple web page. The presentation creates a basic web server configuration. The presentation configures the web server to display the simple web page.

Hardware/Software in this presentation

Operating System: OpenSUSE Leap 42.2 (M State Moorhead spring 2017 version)

Operating System: Windows 10 Anniversary Update

Preuss

4/25/2017



Home



Trash

The presentation logs into Linux.





Demonstration Web Page

This web page has a link.

Alphonse

The presentation enters text for a simple web page as shown. This is simply a word processing document.

This web page has a [link](#).  
Alphonse

The presentation highlights a word in the text.  
The presentation inserts a hyperlink as shown.

**Hyperlink**

**Hyperlink Type**

- Web
- FTP

**URL:**

**Further Settings**

**Frame:**  **Form:**

**Text:**

**Name:**

[Help] [OK] [Apply] [Close] [Reset]

This web page h  
Alphonse

Save - LibreOffice

Places: Home, Network, Root, Trash, 28.0 Gi..., 10.0 Gi...

> Home > Documents

Name: index

Filter: HTML Document (Writer) (.html)

Save with password

Edit filter settings

Automatically select filename extension (.html)

Save Cancel

The presentation saves the document as an "html" document as shown.

Naming the document "index.html" will make the process easier.

Demonstration Web Page

This web page  
Alphonse

Confirm File Format

**This document may contain formatting or content that cannot be saved in the currently selected file format "HTML Document (Writer)".**

Use the default ODF file format to be sure that the document is saved correctly.

Ask when not saving in ODF or default format

**Use HTML Document (Writer) Format** | Use ODF Format

The presentation selects "Use HTML Document (Writer) Format" to continue.





### YaST Control Center @ opensus-s2017

Search [ ]

- Software
- Hardware
- System
- Network Services**
- Security and Users
- Virtualization
- Support
- Miscellaneous

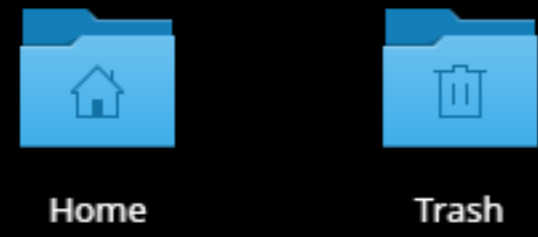
#### Network Services

- FTP Server
- Hostnames
- Mail Server
- NFS Server
- NTP Configuration
- Proxy
- Samba Server
- VPN Gateway and Clients
- iSCSI Initiator
- HTTP Server**  
Configure an Apache 2 server
- LDAP and Kerberos Client
- Windows Domain Membership

#### Security and Users

The presentation opens "YaST" in OpenSUSE. Under "Network Services", the presentation selects "HTTP Server".





### YaST2 - HTTP Server

HTTP Server Configuration

Listen Ports and Addresses | Server Modules | Main Host | Hosts

HTTP Service

Disabled  
 Enabled

Listen on Ports:

Network Address	Port
All Addresses	80

Add Edit Delete

Firewall Settings for SuSEfirewall2

Open Port in Firewall [Firewall Details...](#)

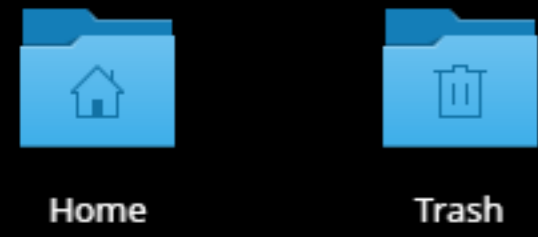
Firewall port is open on all interfaces

Log Files

Help Abort Back Finish

The presentation configures the HTTP Server Listen Ports and Addresses as shown.

Should students be using the wizard, it is easier to select "automatic start at boot".



### YaST2 - HTTP Server

HTTP Server Configuration

Listen Ports and Addresses | Server Modules | Main Host | Hosts

Status	Description
Enabled	Provides for content negotiation
Disabled	Provides support for Perl dynamically generated pages
Disabled	Provides support for PHP5 dynamically generated pages
Disabled	HTTP/1.1 proxy/gateway server
Disabled	AJP support module for mod_proxy
Disabled	mod_proxy extension for CONNECT request handling
Disabled	FTP support module for mod_proxy
Disabled	HTTP support module for mod_proxy
Disabled	Provides support for Python dynamically generated pages
Enabled	unknown
Disabled	Provides a rule-based rewriting engine to rewrite requests
Enabled	Allows the setting of environment variables based on client
Enabled	unknown
Disabled	Attempts to correct mistaken URLs that users might have entered

Toggle Status | Add Module

Help | Abort | Back | Finish

The presentation is not using Perl, Python or PHP in this demonstration. These services are not enabled.



### YaST2 - HTTP Server

HTTP Server Configuration

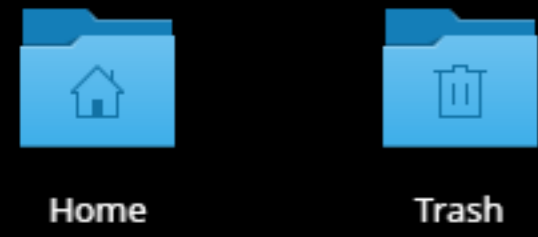
Listen Ports and Addresses | Server Modules | Main Host | **Hosts**

Option	Value
Document Root	<code>"/srv/www/htdocs"</code>
Directory	<code>"/srv/www/htdocs"...</code>
Alias	<code>/icons/ "/usr/share/apache2/icons/"</code>
Directory	<code>"/usr/share/apache2/icons"...</code>
ScriptAlias	<code>/cgi-bin/ "/srv/www/cgi-bin/"</code>
Directory	<code>"/srv/www/cgi-bin"...</code>
mod_userdir.c	
IncludeOptional	<code>/etc/apache2/conf.d/*.conf</code>
IncludeOptional	<code>/etc/apache2/conf.d/apache2-manual</code>
Server Name	<code>opensuse-s2017</code>
Server Administrator E-Mail	<code>root@opensuse-s2017</code>

[Add] [Edit] [Delete]

[Help] [Abort] [Back] [Finish]

The presentation documents the "Document Root". This is the location of html files for the web server.



### YaST2 - HTTP Server

#### HTTP Server Configuration

Listen Ports and Addresses | Server Modules | Main Host | **Hosts**

Ch.	Option	Value
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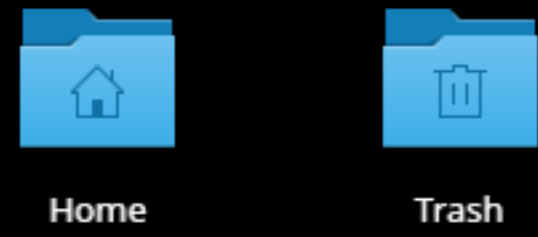
The presentation does not add any hosts.

Add Edit Delete Set as Default

Help Abort Back Finish

# It works!

The presentation opens a web browser. The presentation uses the address "http://localhost" or "http://127.0.0.1" to test the web server. This message shows the web server is successfully running.



```
htdocs : bash — Konsole
File Edit View Bookmarks Settings Help
preuss@opensuse-s2017:~> cd /srv/www/htdocs/
preuss@opensuse-s2017:/srv/www/htdocs> ls
favicon.ico gif index.html info2html.css robots.txt
preuss@opensuse-s2017:/srv/www/htdocs> █
```

The presentation opens a terminal window as shown. The presentation goes to the "Document Root" directory.



```
File Edit View Bookmarks Settings Help
preuss@opensuse-s2017:~> cd /srv/www/htdocs/
preuss@opensuse-s2017:/srv/www/htdocs> ls
favicon.ico gif index.html info2html.css robots.txt
preuss@opensuse-s2017:/srv/www/htdocs> su
Password:
opensuse-s2017:/srv/www/htdocs # cp index.html index.html.original
opensuse-s2017:/srv/www/htdocs #
```

The presentation needs root privilege to continue. The presentation creates a backup "index.html" file as shown.





Home



Trash

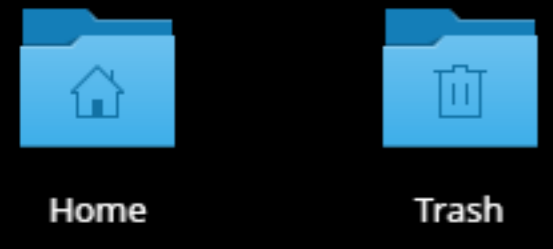
htdocs : bash — Konsole

File Edit View Bookmarks Settings Help

```
preuss@opensuse-s2017:~> cd /srv/www/htdocs/  
preuss@opensuse-s2017:/srv/www/htdocs> ls  
favicon.ico gif index.html info2html.css robots.txt  
preuss@opensuse-s2017:/srv/www/htdocs> su  
Password:  
opensuse-s2017:/srv/www/htdocs # cp index.html index.html.original  
opensuse-s2017:/srv/www/htdocs # cp /home/preuss/Documents/index.html /srv/www/htdocs/  
opensuse-s2017:/srv/www/htdocs #
```

The presentation copies the "index.html" file created by the presentation. This file must be in the "Document Root" directory.

htdocs : bash



```
htdocs : bash — Konsole
File Edit View Bookmarks Settings Help
preuss@opensuse-s2017:~> cd /srv/www/htdocs/
preuss@opensuse-s2017:/srv/www/htdocs> ls
favicon.ico gif index.html info2html.css robots.txt
preuss@opensuse-s2017:/srv/www/htdocs> su
Password:
opensuse-s2017:/srv/www/htdocs # cp index.html index.html.original
opensuse-s2017:/srv/www/htdocs # cp /home/preuss/Documents/index.html /srv/www/htdocs/
opensuse-s2017:/srv/www/htdocs # exit
exit
preuss@opensuse-s2017:/srv/www/htdocs> █
```

Mozilla Firefox

http://localhost/

localhost

### Demonstration Web Page

This web page has a [link](#).

Alphonse

The presentation opens a web browser. The presentation uses the address "http://localhost" or "http://127.0.0.1" to test the web server. This message shows the web server is now using the new web page.



Start [Close] [New Tab]

← → ↻ | [Menu] [Address Bar] [Share] [More]

Where to next?

192.168.241.143 →

http://**192.168.241.143** Website

The presentation uses a Windows 10 virtual machine on the same network to connect. The presentation opens a web browser. The presentation enters the IP address of the OpenSUSE system.



Recycle Bin

192.168.241.143 × +

← → ↻ | 192.168.241.143 [Bookmarks] [Star] [Menu] [Print] [Share] [More]

### Demonstration Web Page

This web page has a [link](#).

Alphonse

The presentation sees success. The Windows 10 successfully obtained the web page from the OpenSUSE server.