
Features and Functionality of the Zeus
Web Server (An introduction)

Zeus and Zeus Lite WEB SERVER

Michael Slavic
Hewlett-Packard
michael_slavic@hp.com

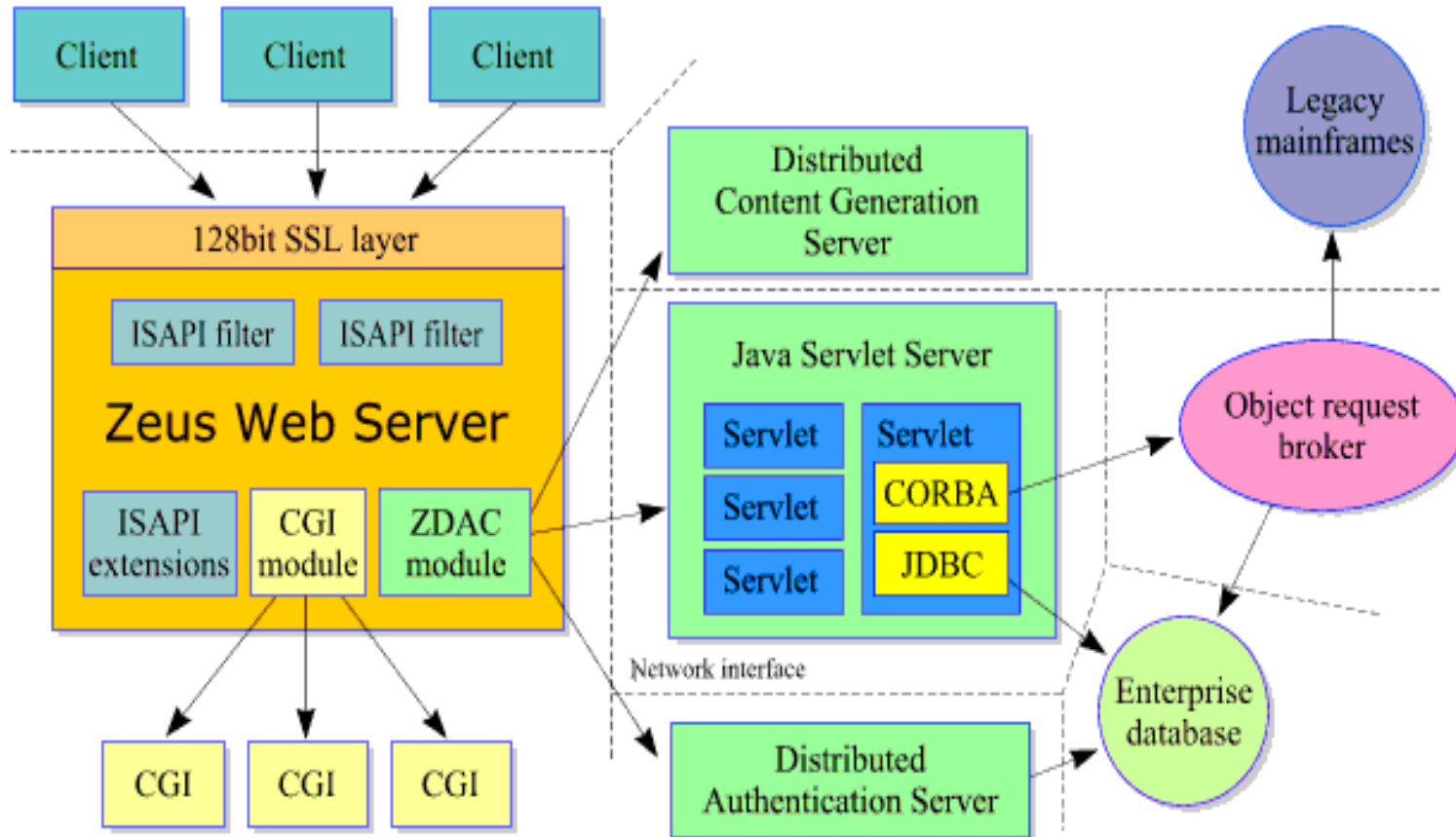
Zeus Web Server (Features)

- High Performance HTTP engine
 - Leading Benchmark Performance
 - http/1.1 compliant
 - scalable architecture
 - virtualhosting and clustering for fault-tolerance and load balancing
 - small memory and footprint

Zeus Web Server (Features con't)

- Web Application Development
 - Secure CGI/Perl sandboxing
 - fastCGI support
 - centralized user and group management
 - java servlet, RMI and CORBA ORB support
 - JDBC database connectivity
 - content generation and authentication (distributed)
 - server side parsing (both static and dynamic)

Web Application Development

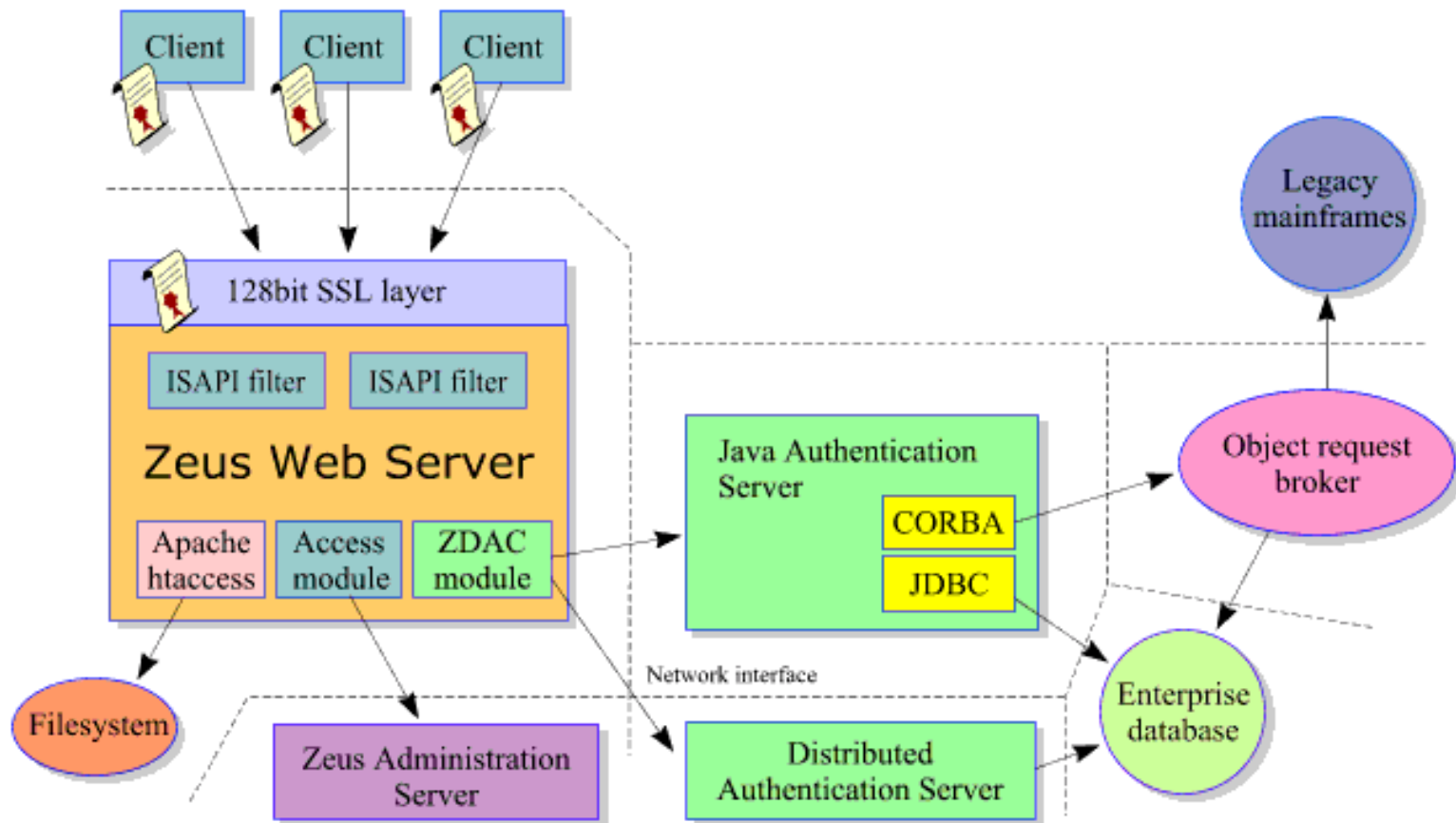


Source: Zeus Technology (<http://www.zeus.co.uk>)

Zeus Web Server (Features con't)

- Security
 - 128 bit SSL3 (worldwide)
 - client side x509 certificates
 - hardware encryption support

Security Framework



Source: Zeus Technology (<http://www.zeus.co.uk>)

Zeus Web Server (Features con't)

- Management and Administration
 - Browser based management (graphical)
 - delegated management / access control
 - centralized user and group management
 - configurations shared among servers
 - scriptable configuration tools for automation
 - help and documentation context sensitive

Zeus Web Server (Features con't)

- Authoring and Publishing
 - Microsoft FrontPage support
 - Netscape Gold support
 - Integrated Search Engine
- Apache Compatibility
 - .htaccess file support
 - logging

Zeus Web Server (Features con't)

- Virtual Server Support
 - independent virtual servers
 - separate administration of virtual servers
 - real time statistics and graphs (web access)
 - delegation of administration
 - Bandwidth throttling per web site
 - Access Controls to the web sites

Web Servers (percent market usage)

- Apache (54.49)
- Microsoft IIS (23.78)
- Netscape (7.02)
- Zeus (2.07)
- httpd (2.07)

- Note: Numbers are from the netcraft survey at <http://www.netcraft.com/survey>

Zeus lite on H P-U X (A tour)

- W hat is Zeus lite?
- W here do you get it?
- H ow do you install it?
- W hat does it look like once it is installed?
- W here does it reside on H P-U X ?
- W hat files exist and w hat do they do?

What is Zeus Lite? (or What do I get with Zeus that I don't with Zeus Lite?)

- Zeus provides the following over Zeus Lite?
 - Unlimited Virtual Server Support
 - Clustering Support
 - 128bit SSL worldwide
 - Real-time activity monitor
 - Advanced CGI security

What is Zeus Lite? (con't) (or What do I get with Zeus that I don't with Zeus Lite?)

- Zeus provides the following over Zeus Lite?
 - Fast CGI support
 - Integrated Search Engine
 - Website Throttling
 - LDAP Home Directories
 - miscellaneous features

Where do I get Zeus Lite

- `www.software.hp.com`
 - select Internet & Security (see note below)
- On the HP-UX Application CD
- Installation via a software depot
 - Note: Apache and Netscape Fasttrack also available

Zeus on HP-UX

- File lay-out

```
# cd /opt/zeus33lite
```

```
# lsf
```

```
adm in/
```

```
perl/
```

```
stop-zeus*
```

```
docroot-default/
```

```
rc.d
```

```
web/
```

```
new config/
```

```
start-zeus*
```

```
webadm in/
```

Location of Log Files and Miscellaneous Information

- Log files
 - /opt/zeus33lite/admin/log/errors
 - /opt/zeus33lite/admin/log/access
 - /opt/zeus33lite/web/log/errors
 - /opt/zeus33lite/web/client_logging.*****
 - /opt/zeus33lite/web/error_logging_log
- Administration Port:9090
 - defaultweb administrator: admin
 - defaultuseradmin password: *****

More on logging

- Zeus uses a DFLog module
 - Needs to be configured to log client requests
 - Automatic Rotation
 - Sharing logfiles among virtual servers
- Definable Log Format
- Common Log Format
 - defacto standard based on NCSA server
 - host ident auth user date request status bytes
- Log Analysis Tools

Configuration Files

- `/opt/zeus33lite/webadm/conf/sites`
 - contains configuration information on web servers
- `/opt/zeus33lite/web/runningsites/default`
 - contains configuration information based on the “running” web servers
- `/opt/zeus33lite/web/global.cfg`
 - contains global configuration information
 - i.e. uid and gid (uid=daemon & gid=other)

Configuration Files

- /opt/zeus33lite/adm in /w ebsite
 - selected file contents for w ebsite configuration

m odules!access!enabled yes

m odules!access!rules!0 !type deny

m odules!access!rules!0 !url /

m odules!access!rules!1 !groups!all

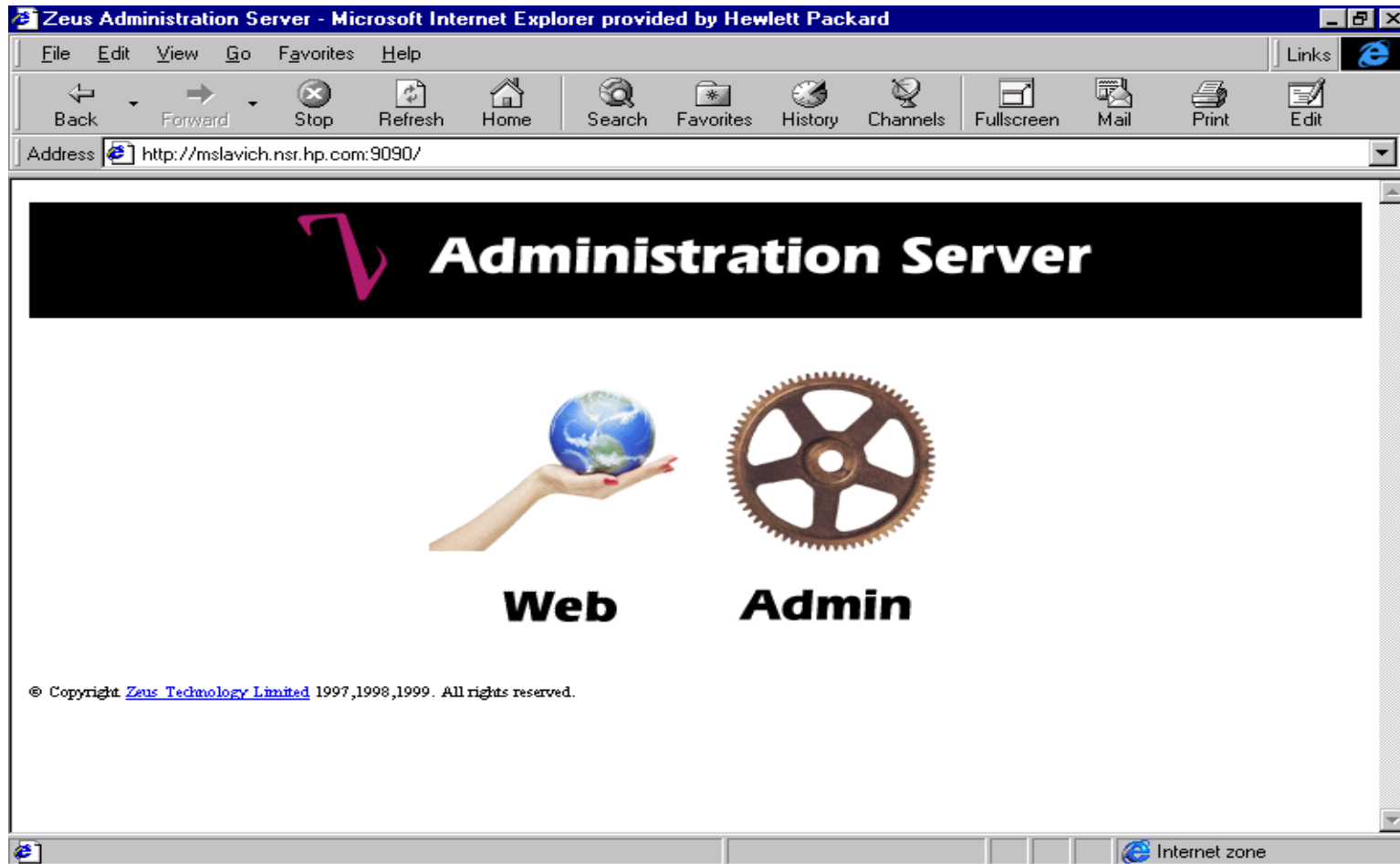
m odules!access!rules!1 !type allow

m odules!access!rules!1 !url /

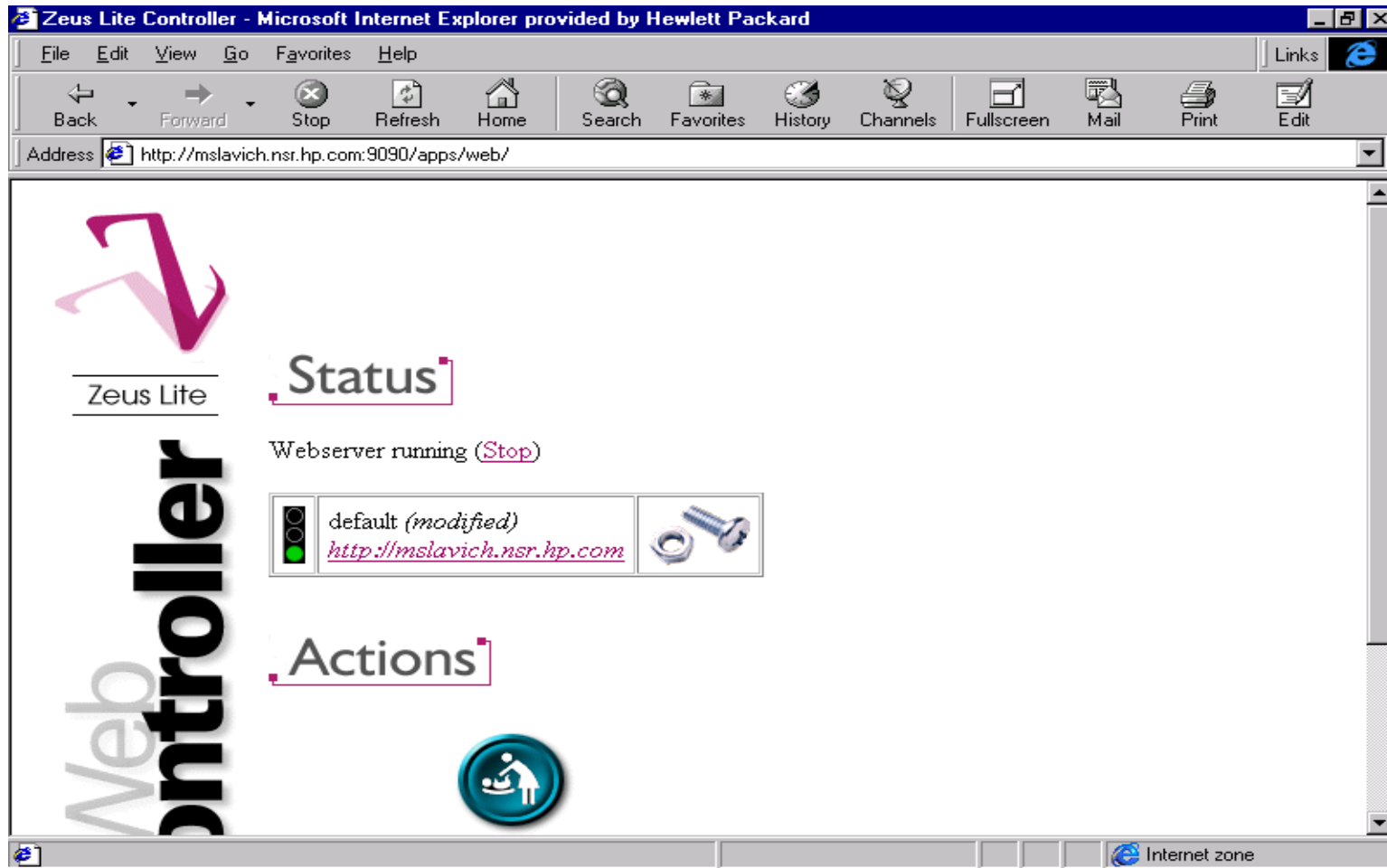
m odules!access!users!adm in ISM vK X pX padD iU oO SoA fw w ==

m odules!cgi!allow anyw here yes

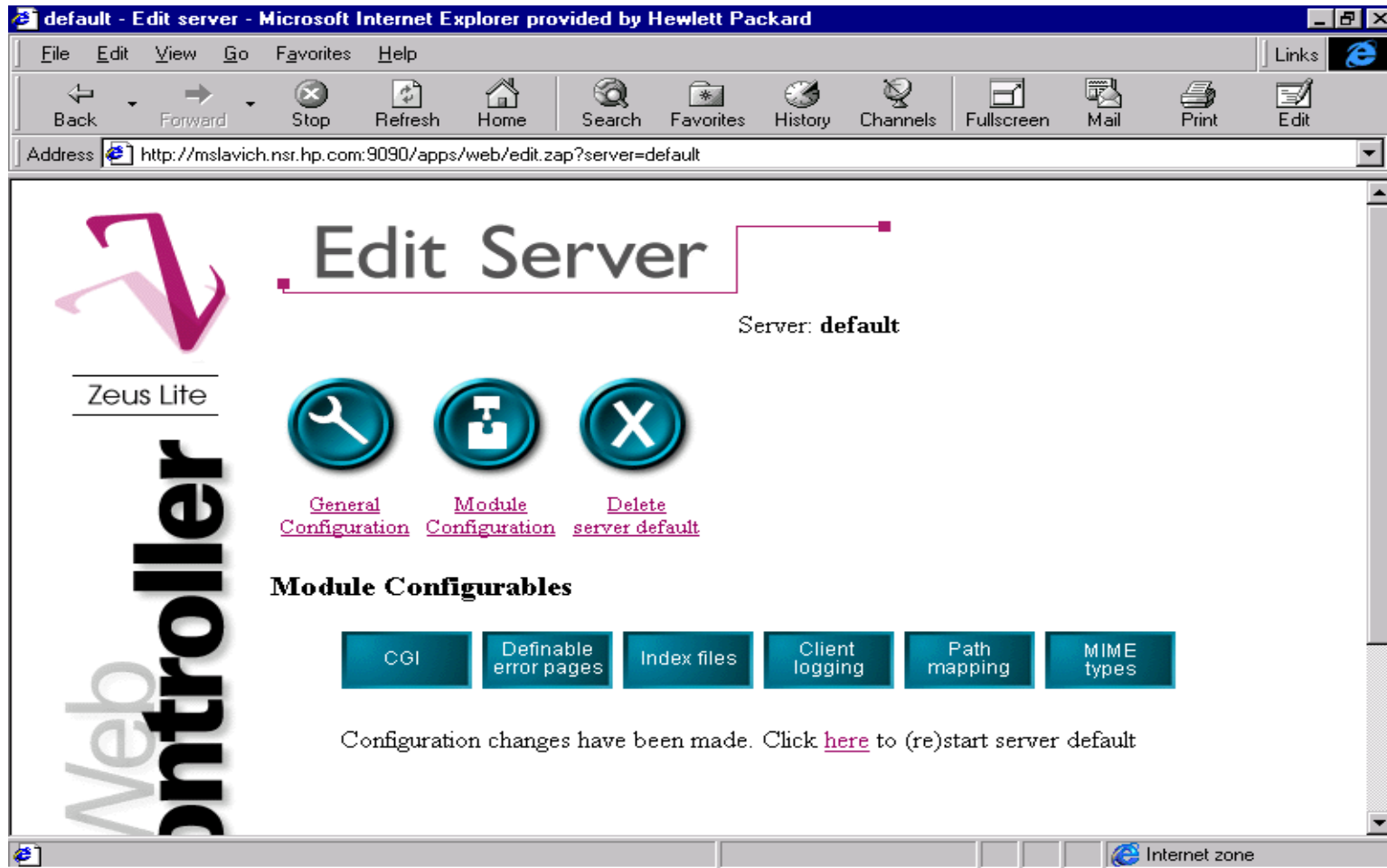
Zeus Administration Server



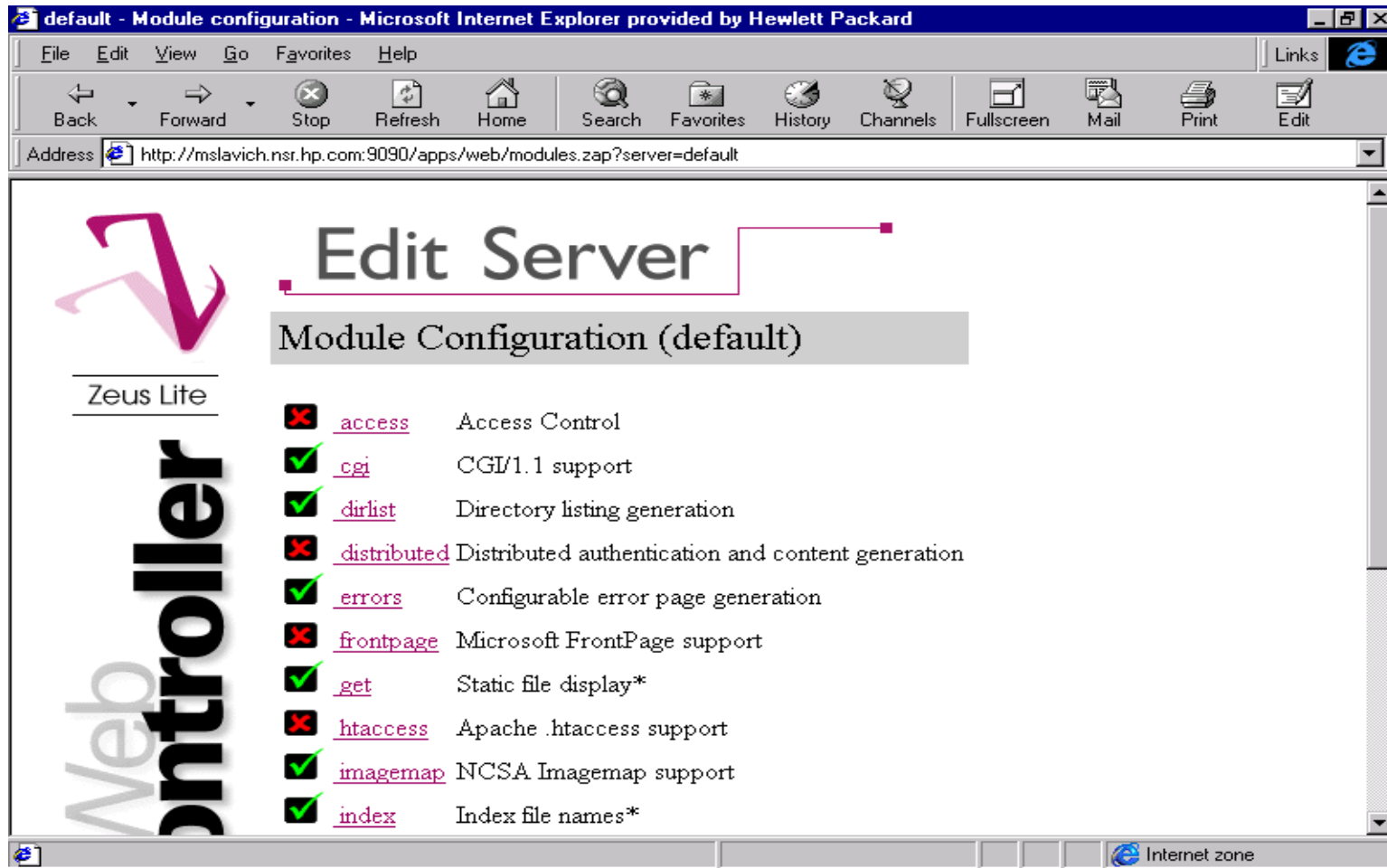
Zeus Administration: Web



Nuts & Bolts = EditServer



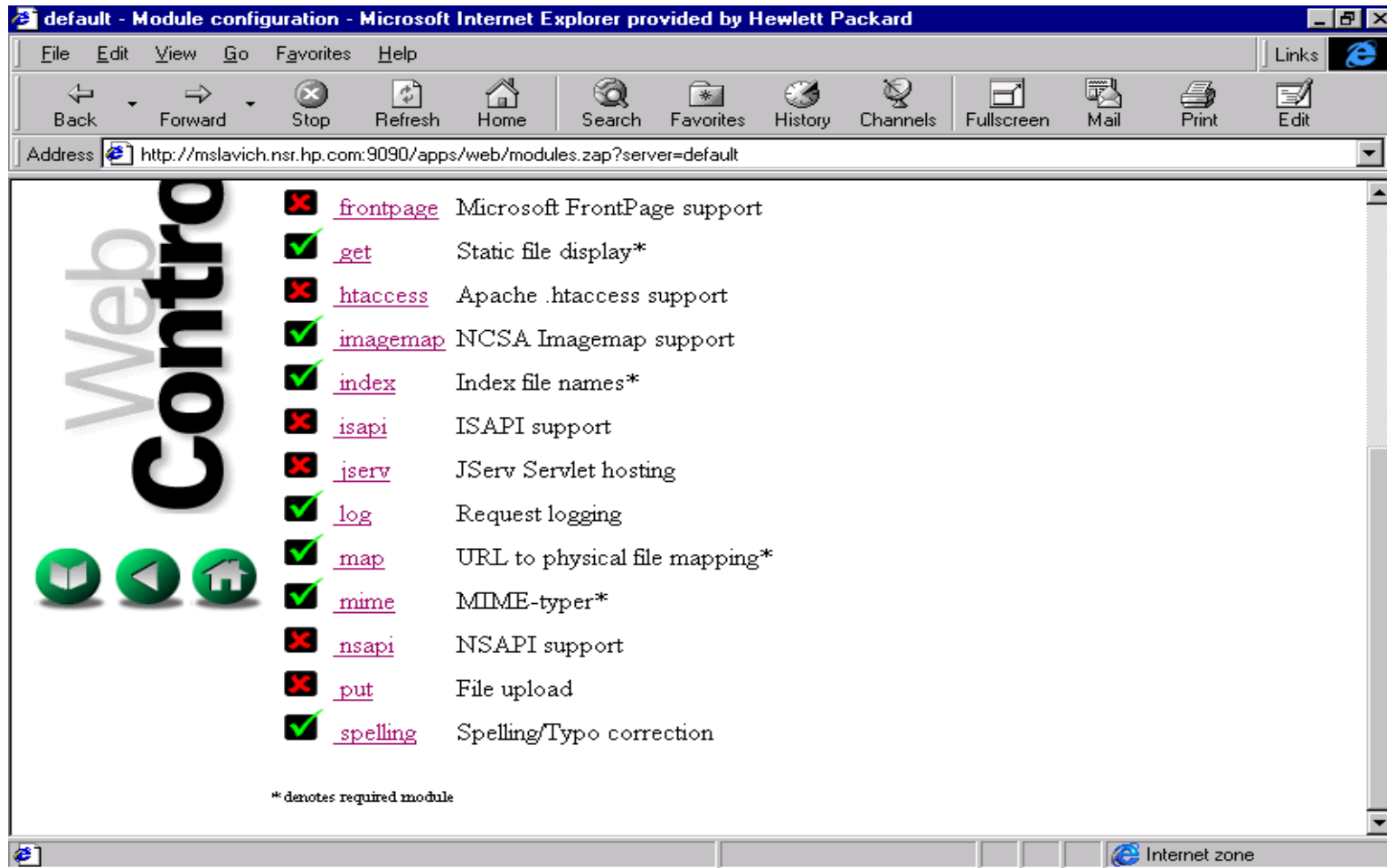
Edit Server



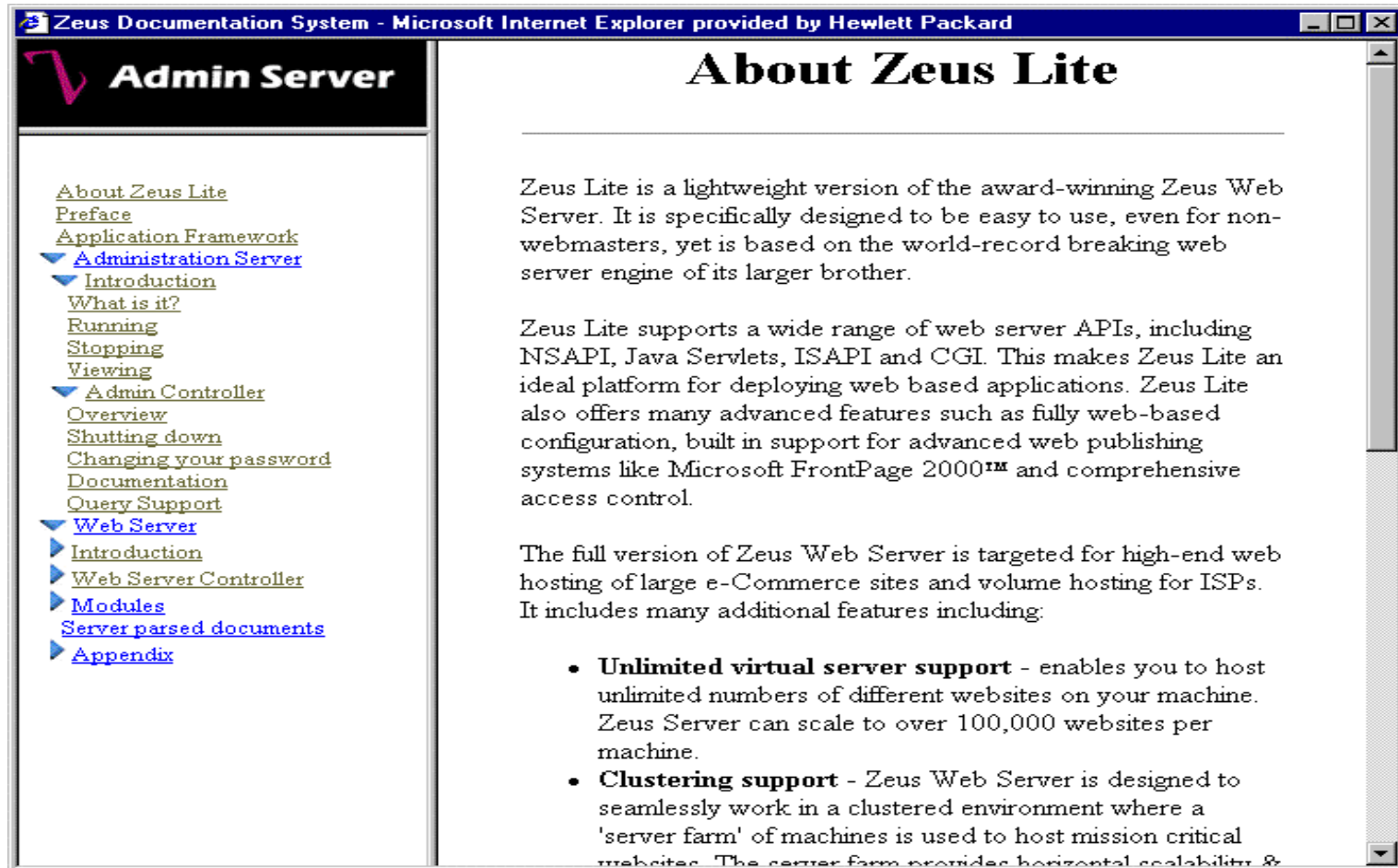
Module Configuration (example)

- access Access Control
 - Current Rules:
 - url; allow /deny; host/ip address; user/group
 - User Management:
 - Internal database and/or LDAP; user/group management; logging options

Edit Server (cont)



Zeus on-line documentation



Zeus on-line documentation



So why Zeus or Zeus Lite?

- Zeus Lite (It's Free on HP-UX)
- Zeus and/or Zeus Lite
 - Performance
 - Small Footprint
 - Features and Functionality
 - Ease of install and administration
 - Complete on-line documentation

More Information About ZEUS

- `www.zeus.co.uk`
- `www.zeustech.net`
- `www.software.hp.com`
 - select Internet & Security