

Buy one 3Gweb®,  
Get one iPad 2 free!  
Limited to first 20 persons

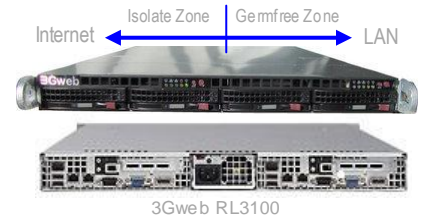
Super Web Server Appliance designed for The CyberWar Age. Fast, Secure.

# 3Gweb® RL3100 Bio Self-Defending Web Platform

**Overview of 3Gweb®** 3Gweb® Self-Defending Web platform is the 3rd generation Web server designed for CyberWar Age. It offers an unmatched Ultra-Secure, Trustworthy and Robust Web platform and business infrastructure to support various Web sites and Internet economics, such as e-government, e-bank, e-commerce, e-news, SOA, SaaS as well as Cloud Computing. 3Gweb's main function is the http server following with the W3C's http protocol standards.



3Gweb® has won the prestigious the "Best of Interop Award 2005" at Network+Interop, one of the largest international event in IT industry. In the words of the head judging team for the Best of Interop Awards, "the process of selecting the winners was rigorous, BitShield's BS-3GWeb-I-2400 is the most innovative solution in the Network Software and Services category, and that's why we selected it as a Best of Interop winner.". 3Gweb has been tested and certified by multi authoritative organizations. Both of USA patent and the trade mark of "3Gweb" has been granted by USA government.



3Gweb® is a super Web server that always send back clean and trusted Web pages to site visitors, with no more defacement, no illegal alteration, and no malicious code. Plus, the Web contents/programs loaded on 3GWeb can't be stolen and the path to intrusion of DB is blocked. 3Gweb® is a first computer around world that with the mechanism of "Digital Skin", "Immunity", "Self-Healing", and "Nervy Monitor", like as human being. Even if intruded by attacker, 3Gweb® can still safeguard itself and Web contents. 3Gweb® does have unsurpassed capabilities that can resist various Web attacks while serve http functions. Specially, 3Gweb is only product that is able to defense against the **Unknown Attacks** which has become the premier cyber attacks now. 3Gweb® is a turn-key, all-in-one, instant appliance that are shipped complete with unique hardware, pre-installed software and pre-configured systems.

## Top Benefits to using 3Gweb®

1. No worry to Web security and Say "Good Bye" to attacker.
2. Save time for Web building and quickly starting web site
3. Save total costs for Web operating and enhance management
  - a. Auto management by Self-Healing and 24x7 self-monitor and alarm.
  - b. Reduce the Downtime Losses and improve under-staffed operation.

## Top Reasons for upgrade to 3Gweb®

1. Fatal flaws existing in the conventional Web servers  
Conventional 2nd gen. Web servers, such as Apache and IIS, include fatal vulnerabilities. For instance, the Web contents are plaintexts that visible and alterable; and exposed to Internet year by year, without inspection and protection. They provide a path for hacker to intrusion of DB. With those vulnerabilities, many prime Web sites have become an attacker's crime factor and tools. Spreading malicious codes, Publish fraud news.....

2. Internet entered CyberWar Age Now  
Internet environment we must face is big changing, ever more dangerous:
 

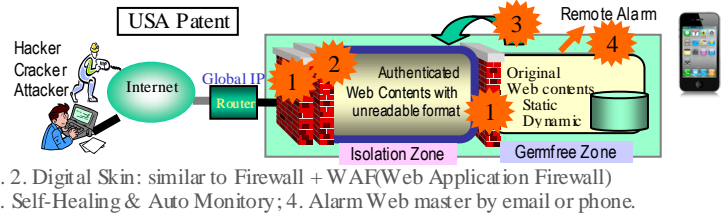
- Cyber Armies are created by governments in 25 nations from 2009;
- Industrialization of hacker, rather than hacker personal attacks.
- "Unknown Attacks" became the primate of cyber attacks.

Cyber attacks grow fast and are ever more frequent, sophisticated, organizational and unpredictable. "Near 200 new malicious software codes pop up every day", said Cyber Security Industry Alliance USA, Dec. 2007!

3. "Perimeter Security +Web" can't offer secured Web platform  
This fact has been repeatedly proven by innumerable cyber crimes and the recent soaring Web sites infected with malicious codes! The perimeter security products, such as Firewall, IDS/IPS, WAF etc., are often ineffective. At the very least "Unknown Attacks" that carry no "attack signature" can't be blocked by these perimeter security products. "Walled-Fortress' security is medieval", Bill Gates, Symantec's Chairman and many security experts derided the idea of the perimeter defense that is old, at RSA conference 2007.

## What are the Innovations?

As a 3<sup>rd</sup> generation Web server, 3Gweb offers both http server function and the most innovative Bio Self-Defending function first in the world. 3Gweb doesn't allow the Web contents being directly accessed from Internet, unlike the conventional Web servers. In 3Gweb, there are two physical zones. Gemfree zone is for placing original Web contents and Isolation zone is for connecting to Internet and provide the http server functions. So, 3Gweb can physically isolate the inside DB from Internet while Web serve.



1. 2. Digital Skin: similar to Firewall + WAF(Web Application Firewall)  
3. Self-Healing & Auto Monitor; 4. Alarm Web master by email or phone.  
To defense against the **Known Attacks**, an advanced "Digital Skin" is able to resist various Known web attacks, whether come from system/network layer or Application layer. Such as DDoS, Buffer Overflow attacks, SQL Injection, XSS, Input Validation Attack, Nimda etc., will be blocked at here.

To resist the **Unknown Attacks**, cutting-edge functions of "Self-Healing", "Immunity", and "Nerve Monitor" are implemented in 3Gweb. Even if an attacker intrude into the Web server by any Unknown Attack method, 3Gweb can still safeguard itself and Web contents and is able to ensure the functionality of the Web server continually. Using its innovative technologies, such as Zero-Second Recovery, message authentication and other more, 3Gweb can prevent illegal alteration, injection of malicious codes, theft of sensitive data and/or Web programs, intrusion of the inside DB and much more. Furthermore, the 3Gweb can monitor itself automatically and can alarm the webmaster at once if an attack or system failure had occurred.

Plus, 3Gweb provides a new functions of the Mobile Maintenance and the "Shutdown Protection" which allow you to remotely reboot, monitor and access 3Gweb from iPhone, iPad from anywhere, anytime, even if 3Gweb was shutdown by hacker!

## Comparison with conventional Web servers

	Second Gen. Web Server (Apache, IIS etc)	Next Gen. Web Server
Products	Software (Need other hard and software)	All-in-one, Soft+ Hardware
Main Function	HTTP server	HTTP server
Trustworthy	None (Web contents are Alterable)	Guarantee (Can't be altered)
Anti-Attack (Known attacks)	None (Need other perimeter Security Products)	OK
Anti-Attack (Unknown attacks)	None (No way to prevention)	OK
Monitor and Alarm	None	OK
Time of integration for basic system	Long (2 to 4 weeks or more)	Instant (all-in-one)
Total costs for building a site	High	Low
Total operating Cost	High	Low

2nd generation Web server, the same as a baby suffering from leukemia. A common cold may be killed. No matter how many doctors and nurses around the full circumference, and even the police, can't live long. It's for Internet hacker Age only.  
3rd generation Web server as robust adults, can robustly work more long-term in the Internet World. Like human who can long-term survival and proliferation in the Natural World where is full viruses and bacteria, as the same reason. It's for Internet Cyber War Age.

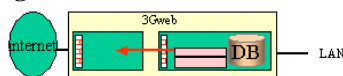
## About our Self-Defense Technology



Our Self-Defense technology is based on the most innovative “Computer Bio-Security principle”. We have successfully clone the Bio-Self-Defense mechanism existing in the human body, which consists of “Skin”, “Immunity”, “Self-healing” and “Nerve system”, into the computer first in the world. The Self-Defense is the reason why human can against infections, diseases, and other invasions from viruses or germs, and survives in the Natural World with long-lifespan.

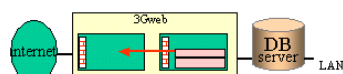
## Multi-Tier Web Site and Cloud Computing

### Single-Tier Web Site



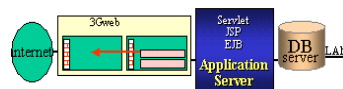
- Both Web server and DB server are pre-installed in one chassis.  
- Ideal solution for Web Hosting industry.

### Dual-Tier Web Site



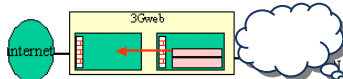
- Web server and DB server are on separate host. Supports: Oracle, DB2, Sybase, etc.  
- High security and performance

### Three Tier Web Site



- Separate Web, Application server and Database server. Used for large Web sites. Support various application servers such as: IBM WebSphere, Jboss, Weblogic, etc.

### Cloud Computing



- Support to Cloud Computing, whether Public Cloud or Privet Cloud.

## Specification of 3Gweb RL3100

Maximize energy efficiency and performance density in only 1U rack mount chasses with the two motherboards! With Intel’s latest multi-core CPU technologies, and the most innovative High-Density HPC (High-Performance Computer), 3Gweb provide an idea, highest class Web platform for various critical business. It is high-performance, high-reliability, faster and smaller.

The 3Gweb® RL3100 is Best-in-class for large traffic Web site such as government, Bank and enterprise-wide, ISP, etc.

Tab2. Technical Specification of the 3Gweb® RL3100

HTTP server	3Gweb® + Apache	
OS	Red Hat Linux Enterprise 5.x	
Requests per second *1	> 3,500	
Transfer rate *1	> 40,000 Kbytes/sec = 320Mbps	
File managing Capability	MAX Number of files: 5,000,000. MAX Length of path+file_name: 500bytes	
Security	Self-Defending: Digital Skin, Immunity, Self-Healing, Nerve Monitor open-SSL, SSH My SQL (Gemfree Zone only)	
Data Base	PHP; Perl; Java;	
Web Language	Web Based Administration Tool; FTP; sendmail, etc.	
Admin Tool	KVM over LAN	
Hosts	Public ( Isolate Zone)	Private ( Gemfree Zone)
Processor	2 x Six-Core Intel Xeon CPU 64bits	2 x Six-Core Intel Xeon CPC 64bits
Memory	16GB 1333MHz DDR3 ECC	16GB 1333MHz DDR3 ECC
Hard Drive	2 x 2TB SATA; 7200RPM; MTBF 1.2million Hrs., Hot swap, RAID1	2 x 2TB SATA; 7200RPM; MTBF 1.2million Hrs., Hot swap, RAID1
Interface	2x Gigabit Ethernet, Port RJ45 support both IPv4 and IPv6, 4 USB, and VGA Prot	2x Gigabit Ethernet, Port RJ45 support both IPv4 and IPv6, 4 USB, and VGA Prot
Operation Temperature	10° to 35°C (50° to 95 °F)	
Operation Relative Humidity	8% to 90%	
Power Supply	1200W AC w/RFC, High-efficiency	
Form Factor	1U Rack mount;	
Dimensions	H1.7'(43mm)x W17.2'(437mm)x D27.75'(705mm)	
Warranty	1 Year (Include); 2Years: +2% price; 3 Years: + 5% price	

\*1: The performance dependson your network and the web file be used. Tested results are based on an index.html file attached in the 3Gweb which size is 11.76KB, and on LAN

## KEY FEATURES

### High Trust & Ultra-Secure Web Infrastructure

- **High Trust:** Always send clean and trusted Web page to your visitors. No more defacement, no viruses/worms, no malicious codes! Safeguard your brand investment, organization's reputation, Web presence as well as your critical business.
- Guarantee the Web pages visitors see are owner's original contents without any illegal alteration.

### Powerful HTTP Server Functions

- High speed, high performance as well as high reliability!
- Completely meet the Web standards (Apache):
  - URL (Uniform Resource Locators)
  - HTTP (Hypertext Transfer Protocol);
  - HTML (Hypertext Markup Language);
  - CGI (Common Gateway Interface);
- Static Pages (html, jpg, gif, wav, mp3, mov, Flash, XML etc.)
- Dynamic Script (CGI script, shtml, Perl, php, java, etc.)
- Virtual Host ( built multi Web sites on one server),
- DSO (Dynamic Share Object), and SSI (Server Side Includes),
- SSL (Secure Sockets Layer), SSH
- Pre-installation: MySQL, PHP, Perl, etc.

### Cost-Effective, Instantly and Easy

- Save total operation costs for Web daily management, System Integration and save great costs for disaster recovery;
- Reduce the Downtime Losses of Web site.
- Easy Start: Instant Web server, all-in-one with high trust software and high performance hardware computer.
- Easy Transfer: easy shift from 2<sup>nd</sup> gen. Web server to 3Gweb.
- Easy Usage for daily update site; no change with the 2<sup>nd</sup> gen. Web
- Auto management, round-the-clock Self-Monitoring and alarm Offers Web based control panel and various Log files
- Support multi-tier Web site and Web application server (IBM WebSphere etc.) as well as Cloud computing etc.
- Compatible with the current security products.

### Cutting-edge Self-Defense & Top Anti-Attacks

- Resist 100+types of Known attacks include 6 kinds of DDoS, 30+kinds of Buffer Overflow, SQL Injection, Codered, etc
- Only solution for Unknown Attacks such as the future attacks, unpublished hacking technologies, Zero Day attack etc.
- Prevent hijacked by hacker to spreading malicious code.
- **Anti-defacement:** cutting-edge “0 Sec. Recovery Technology” guarantees that the exposed time of defacement is 0 seconds! Anyone never see a defacement or alteration – at any time.
- **Self-Healing:** Rapid recover if detected a defacement or deleting of the Web contents. Non-interrupt active of Web action.
- **Immunity mechanism:** Web contents, both static files and dynamic scripts will be protected by authentication technology with a unique unreadable format; which can't be infected or modified by any viruses – whether known or unknown!
- **Anti-Stolen & Anti-Divulging the secret:** Prevent theft of the sensitive Web contents on the HD even if attacker has intruded the Web server. Prevent stolen of secret information for access DB such as password, IP address, name etc.
- **Physically Separating by Specialized Hardware:** “Isolation Zone” and “Gemfree Zone” are on two separate mother-boards to isolating the Internet and internal LAN physically.
- **Isolates original Web contents, DB** from Internet access.
- **Advanced Digital Skin:** Prevent various known attacks include both network and application layer attacks. It can filtering both http and https protocol! Automatically block attacker's IP if catch the attack.
- **Shutdown Protection:** reboot from iPhone, even the server was shutdown by hacker
- Get alarm by mobile phone or email at once if attacks happen.
- **Specialized and Advanced Computer Technologies.**
  - Dual motherboards in one chassis!! ISO 9001 Certification
  - Two Six-Core Intel Xeon 64bits CPUs, for each motherboard
  - Two hot swap HDDs with RAID1 and MTBF of 1.2million hours, for each motherboard.
  - High-Density, High reliability, High performance !
  - 4 Intel Gigabits Ethernet Ports , support both IPv4 and IPv6