

## INTERNET GATEWAY

DHCP Server, DNS Server, 802.1Q VLAN Support, PAT, 1:1 NAT, Dynamic NAT Pool, Public IP Pools, IPnP, SIP, PPTP, & VPN Pass-through.

## FIREWALL

Stateful Firewall with ACL, OS fingerprinting support. Rate limiting for spam, worm and malicious user quarantine. Source, destination & IP protocol based rules. Rules based routing for failover and load balancing.

## WAN LOAD BALANCING

Internet load balancing and link aggregation using weight algorithms using multiple ISP's to provide more bandwidth availability and failover. Policy and usage based link balancing extends the functionality to more practical real world scenarios.

## TRAFFIC SHAPING

Policy based, user, protocol and IP based traffic shaping to provide better controls over internet usage. Deep Packet Inspection and L7 signature analysis to identify, prioritize or block traffic. Bandwidth throttling and rate limitation on per user basis. Ability to guarantee bandwidth by application or on demand.



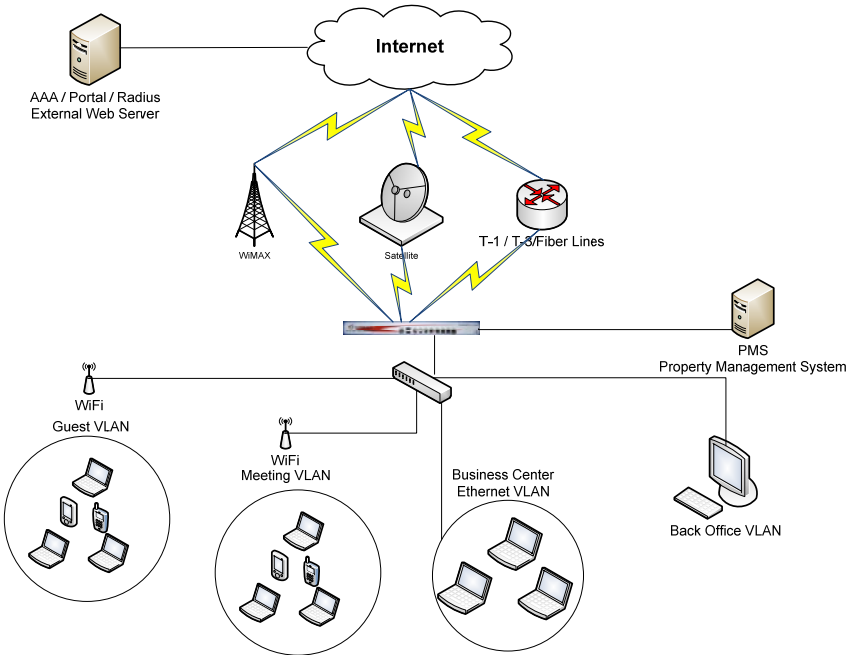
**XcessPro™ MSC** - an Intelligent Network Appliance - Guarded Systems is pleased to introduce its industry leading access gateway and network appliance, XcessPro™ MSC (Multi Services Controller). Xcesspro MSC is much more than a just another gateway, it's a multi-functional appliance designed to replace a full rack of disparate but valuable appliances (e.g. gateway server, Firewall, link load balancer, packet shaper, and DPI Appliance). While the complete design saves thousands of dollars in expense, more importantly the Xcesspro MSC is designed to deliver the functions of four separate devices, on one seamless platform and appliance. This is a very important distinction. Most typically, stacking separate devices for authentication management, bandwidth aggregating, packet shaping and signature traffic reporting, and content caching, means that many of the best features found in each individual device are actually "turned off" in order to integrate the stack so that it functions in a stable manner. This is because each device has been manufactured by the different vendor using a its own operating system, its own methodology, operational process, logic and integration method.

These devices were never designed to work together as one global integrated platform or to be compliant with each other's features. We have effectively solved this problem in form of MSC.

**Xcesspro MSC** is a single device, designed from ground up to address the needs of networks deployed today and in future. The open architecture of Xcesspro MSC ensures that future needs of networks are met. By carefully integrating proven FreeBSD platform with industry leading technologies such as Proxy Server, IDS/IPS engine, DPI engine and cutting edge NMS for flow based decision making and many other technologies have produced a solution that not only pushes the technology to its limits but also delivers a cutting edge solution that Guarded Systems has been known to deliver.



### Typical Deployment Architecture



### CAPTIVE PORTAL

Pre Login & Post Login Captive Portal. Per VLAN pre and post login custom captive portals. Content rich locally hosted pages. Walled Garden and MAC/IP based pass through. MAC based captive portal to be offered soon.

### BILLING INTERFACES

Payment Interfaces such as Bill to Room via Serial PMS Interface, Credit Cards Interface and prepaid accounts.

### NETWORK MONITORING

Complete monitoring of devices such as Access Points, Ethernet Switches, DSLAM's, DSL modems etc. Detailed stats of up time and SLA management. Device failure notices. Complete insight into the core network using state of the art network diagnostic tools.

### REPORTING

Comprehensive reporting module to study the patterns and usage of the internet bandwidth. Reports based on protocols and individual users to better understand the individual needs and future demands.

### Network Health and History

CURRENT	WEEK	MONTH	
Network Health			
MDF	UP/DOWN	TIME	DETAILS
SERVER	✓	100%	DETAILS
SWITCH 1	✓	100%	DETAILS
IDF 1	UP/DOWN	TIME	DETAILS
SWITCH 2	✓	100%	DETAILS
SWITCH 3	✓	100%	DETAILS
CONTROLLER 1	✓	100%	DETAILS

### Traffic and Usage Analysis



### Revenue Management and Reports

DAY	WEEK	MONTH	YEAR	DETAILS
Revenue Report				
	USER	REVENUE		
CURRENT	10	\$ 100.00		
DAY	28	\$ 120.00		
ACTIVE TOTAL	28	\$ 280.00		



## Xcesspro MSC Features

Capacity & Performance	MSC-100	MSC-200	MSC-500	MSC-1000
Max. Concurrent Users	100	200	500	1000
Maximum Sessions	2000000	4000000	6000000	8000000
Maximum Throughput	200 Mb	400 Mb	800 Mb	1.6 Gb
Encrypted throughput (3DES)	100 Mb	200 Mb	400 Mb	800 Mb
Max. VPN Tunnels	300	750	1500	3000
NAT , PAT, 1:1 NAT, Dynamic NAT Pool	Yes	Yes	Yes	Yes
Static Route	Yes	Yes	Yes	Yes
DHCP Server	Yes	Yes	Yes	Yes
DHCP Relay	Yes	Yes	Yes	Yes
HTTP Proxy Support	Yes	Yes	Yes	Yes
WAN Client	DHCP/Static PPPoE/PPTP	DHCP/Static PPPoE/PPTP	DHCP/Static PPPoE/PPTP	DHCP/Static PPPoE/PPTP
NTP Support	Yes	Yes	Yes	Yes
Max # of VLAN's	128	528	1024	4000
Recommended # of Maximum WAN Links	4	8	12	16
Firewall & Security	MSC-100	MSC-250	MSC-500	MSC-1000
Stateful Firewall	Yes	Yes	Yes	Yes
Packet Normalization Scrubbing	Yes	Yes	Yes	Yes
Source IP, Protocol, Destination based Filtering	Yes	Yes	Yes	Yes
OS Finger Printing	Yes	Yes	Yes	Yes
L7 Filter	Yes	Yes	Yes	Yes
Application based Filtering	Yes	Yes	Yes	Yes
Snort Rules Compatible	Yes	Yes	Yes	Yes



## Xcesspro MSC Features

Link Load Balancer	MSC-100	MSC-200	MSC-500	MSC-1000
Out Bound Load Balancing	Yes	Yes	Yes	Yes
In Bound Load Balancing	Yes	Yes	Yes	Yes
Policy Based Load Balancing	Yes	Yes	Yes	Yes
PRIQ/CBQ/HFSC Load Balancing	Yes	Yes	Yes	Yes
Per User Load Balancing and QoS Policies	Yes	Yes	Yes	Yes
Networking	MSC-100	MSC-250	MSC-500	MSC-1000
Gigabit Interface Ports	8	8	8	8
Console Port	1	1	1	1
Serial Port	1	1	1	1
System Management	MSC-100	MSC-250	MSC-500	MSC-1000
SSL Based GUI Management Console	Yes	Yes	Yes	Yes
SSH Support	Yes	Yes	Yes	Yes
CLI Support	Yes	Yes	Yes	Yes
Hardware Specs	MSC-100	MSC-250	MSC-500	MSC-1000
On Board Storage Capacity	40 GB SSD	80 GB SSD	120 GB SSD	200 GB SSD
Processor	Dual Core	Quad Core	Xeon Quad	Xeon Quad
RAM	2 GB	4 GB	8 GB	12 GB
Environmental Specs and Certifications	MSC-100	MSC-250	MSC-500	MSC-1000
Power Requirement	110 AC	110 AC	110 AC	110 AC
Operating Temperature	32° to 104° F	32° to 104° F	32° to 104° F	32° to 104° F
Certifications	CE and FCC "A"	CE and FCC "A"	CE and FCC "A"	CE and FCC "A"
Form Factor	1U Rack Mountable	1U Rack Mountable	1U Rack Mountable	1U Rack Mountable
Warranty	MSC-100	MSC-250	MSC-500	MSC-1000
Hardware	1 Year	1 Year	1 Year	1 Year
Software	90 Days	90 Days	90 Days	90 Days