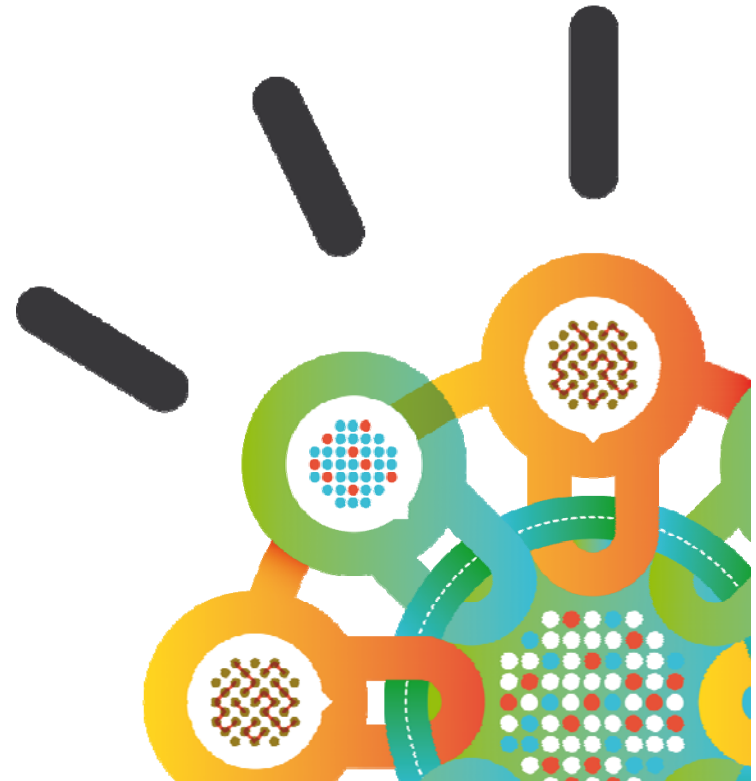

Security Intelligence.
Think Integrated.

IBM Security Network Protection XGS 5000

Introducing IBM's Next Generation of Intrusion Prevention Solutions

Andrew Sallaway
Security SWAT Team
IBM Security Systems



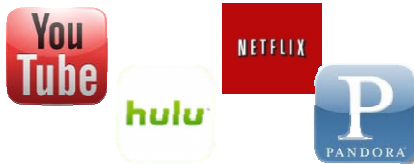
The challenging state of network security



Stealth Bots • Targeted Attacks
Worms • Trojans • Designer Malware

SOPHISTICATED ATTACKS

Increasingly sophisticated attacks are using multiple attack vectors and increasing risk exposure



STREAMING MEDIA

Streaming media sites are consuming large amounts of bandwidth



SOCIAL NETWORKING

Social media sites present productivity, privacy and security risks including new threat vectors



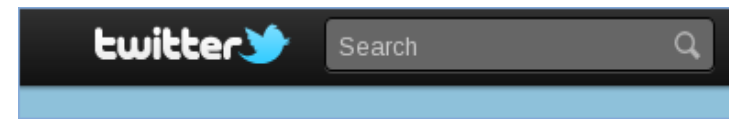
URL Filtering • IDS / IPS
IM / P2P • Web App Protection
Vulnerability Management

POINT SOLUTIONS

Point solutions are siloed with minimal integration or data sharing

Consumerisation of the Enterprise

- Block completely?
 - Some applications are business relevant
 - Not a good look for employers
- Controlled access
 - Shouldn't the marketing department have unobstructed access to facebook and twitter
 - Perhaps we could let employees read their private Email accounts or Facebook between 12noon and 2pm each day?
 - Limit any private email to text only (not files)
 - Only allow “read” of Facebook
- Shouldn't employees be allowed to use Skype for contacting overseas offices?
 - How to handle “thick” client applications



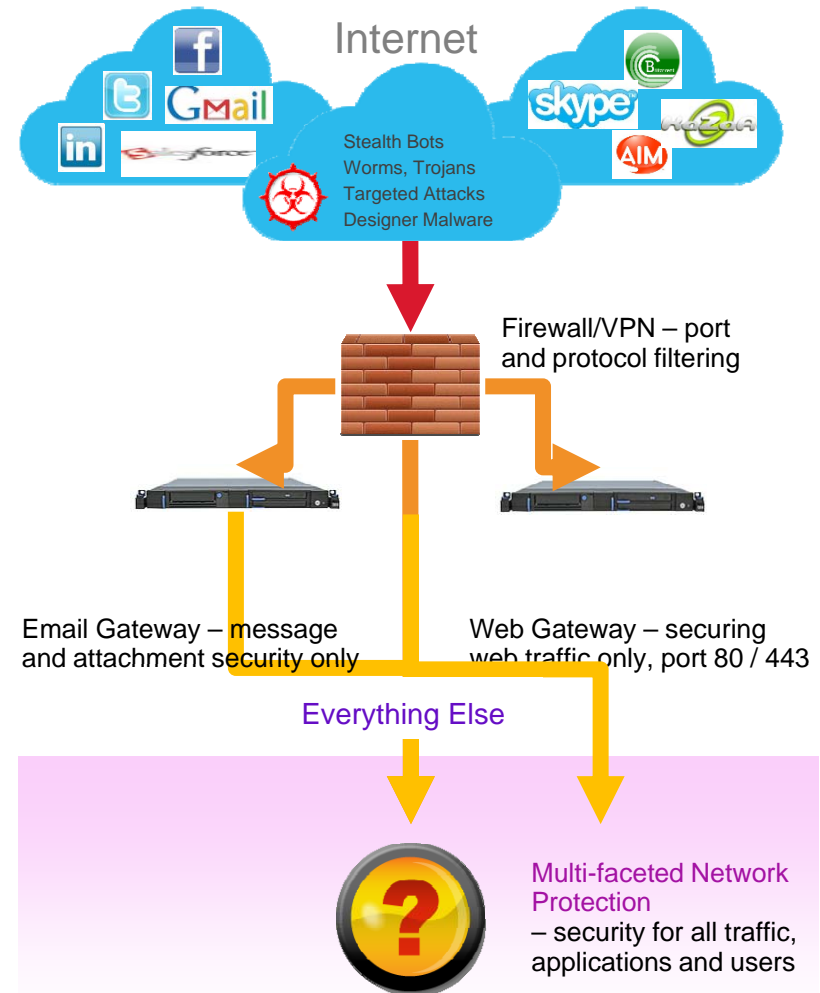
Network Defense: Traditional solutions not up to today's challenges

Current Limitations

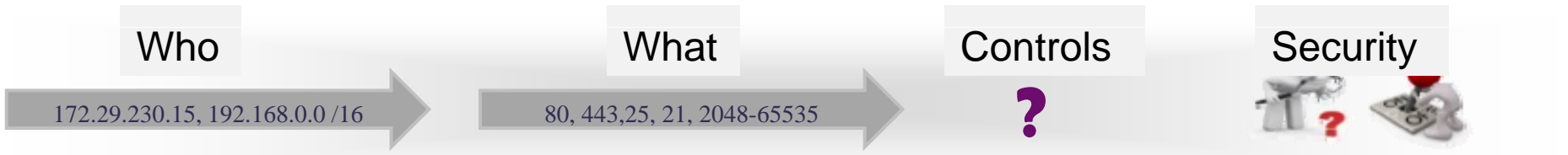
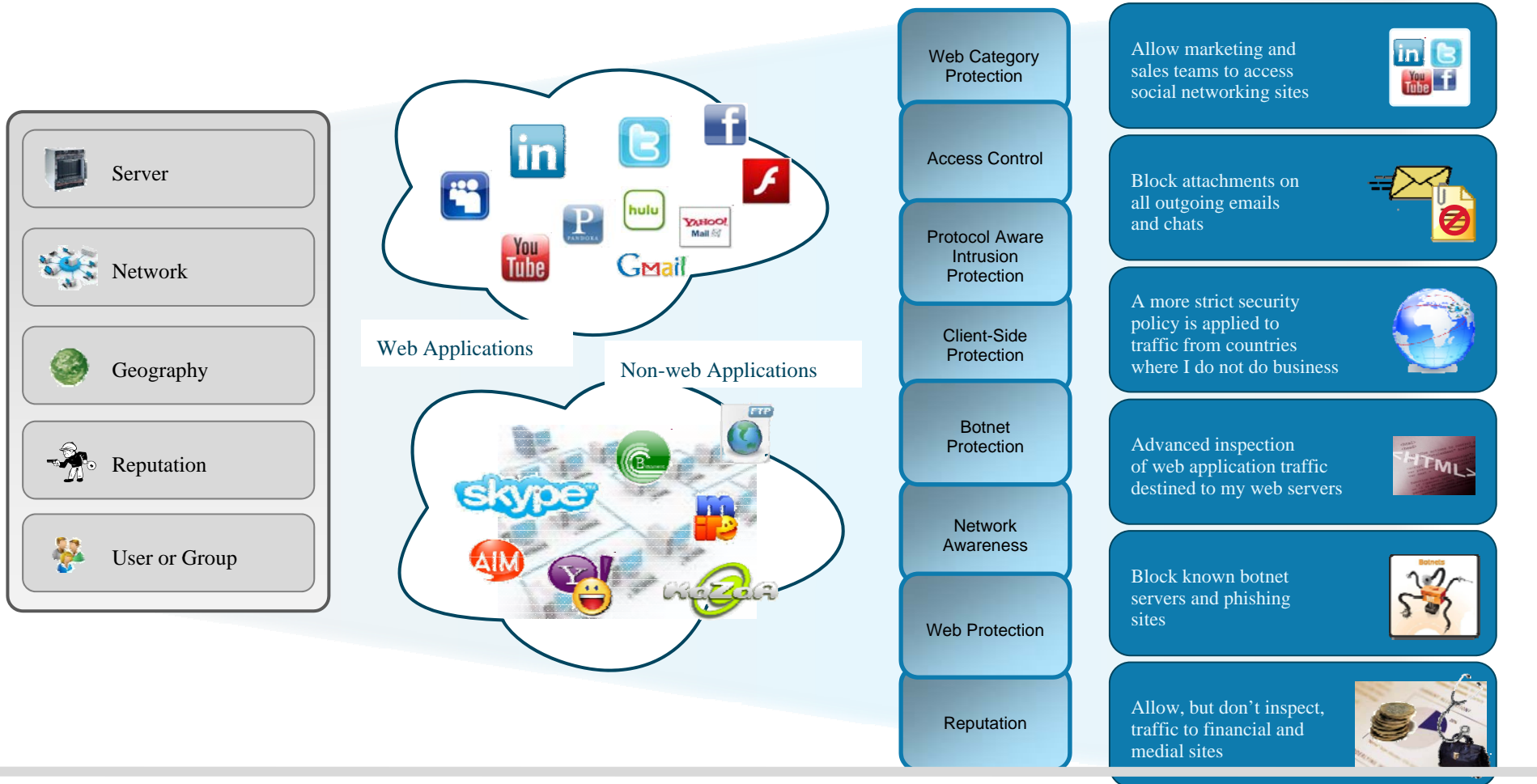
- Threats continue to evolve and standard methods of detection are not enough
- Streaming media sites and Web applications introduce new security challenges
- Basic "Block Only" mode limits innovative use of streaming and new Web apps
- Poorly integrated solutions create "security sprawl", lower overall levels of security, and raise cost and complexity

Requirement: Multi-faceted Protection

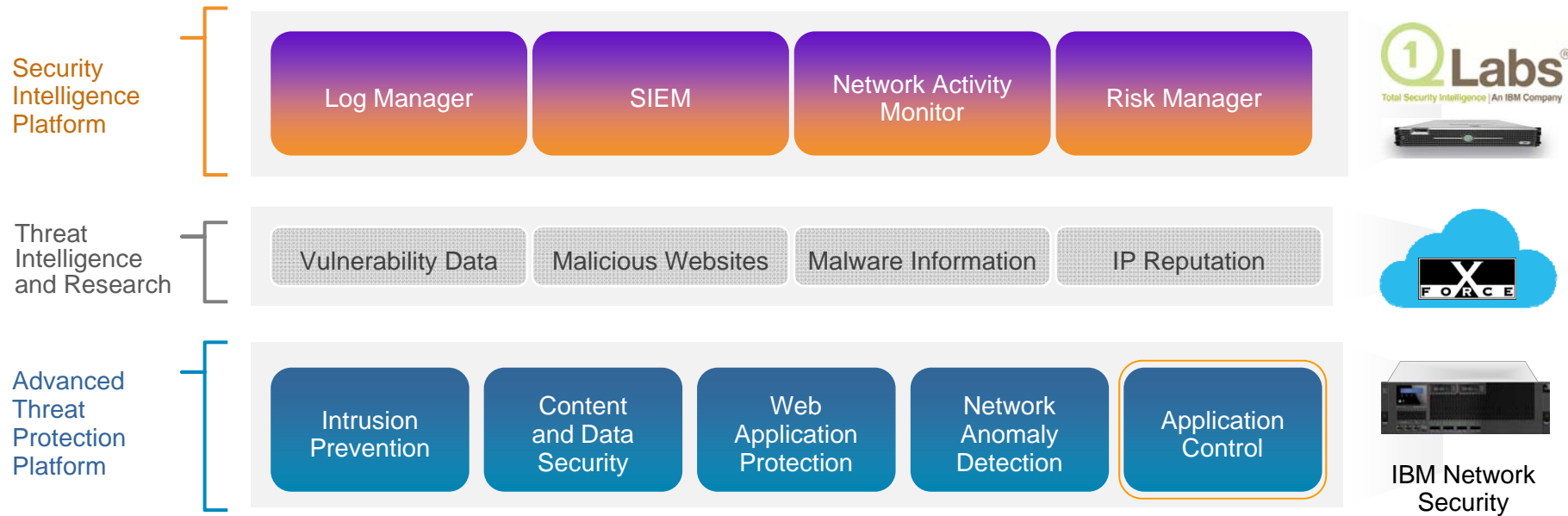
- 0-day threat protection tightly integrated with other technologies i.e. network anomaly detection
- Ability to reduce costs associated with non-business use of applications
- Controls to restrict access to social media sites by a user's role and business need
- Augment point solutions to reduce overall cost and complexity



The Need to Understand the Who, What, and When



The Advanced Threat Protection Platform



Advanced Threat Protection Platform

Ability to prevent sophisticated threats and detect abnormal network behavior by leveraging an extensible set of network security capabilities - in conjunction with real-time threat information and Security Intelligence

Expanded X-Force Threat Intelligence

Increased coverage of world-wide threat intelligence harvested by X-Force and the consumption of this data to make smarter and more accurate security decisions across the IBM portfolio

Security Intelligence Integration

Tight integration between the Advanced Threat Protection Platform and QRadar Security Intelligence platform to provide unique and meaningful ways to detect, investigate and remediate threats

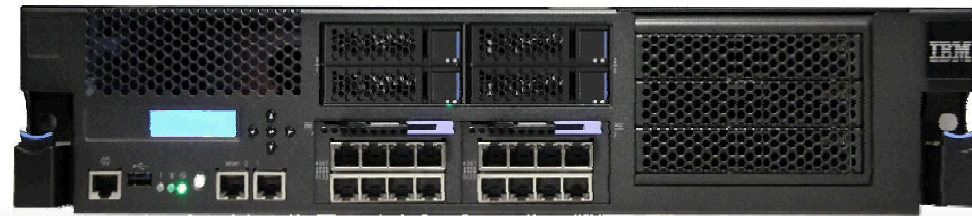
Introducing IBM Security Network Protection XGS 5000



IBM Security Network Protection XGS 5000 builds on the proven security of IBM intrusion prevention solutions by delivering the addition of next generation *visibility* and *control* to help balance security and business requirements

Proven Security: Extensible, 0-Day Protection Powered by X-Force®

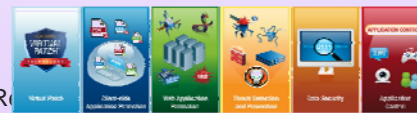
- Next Generation IPS powered by X-Force® Research protects weeks or even months “ahead of the threat”
- Full protocol, content and application aware protection goes beyond signatures
- Expandable protection modules defend against emerging threats such as malicious file attachments and Web application attacks



IBM Security Network Protection XGS 5000

IBM Security Threat Protection

- Vulnerability Modeling & Algorithms
- Stateful Packet Inspection
- Port Variability
- Port Assignment
- Port Following
- Protocol Tunneling
- Application Layer Pre-processing
- Shellcode Heuristics
- Context Field Analysis
- RFC Compliance
- Statistical Analysis
- TCP Reassembly & Flow R
- Host Response Analysis



- Backed by X-Force®
- 15 years+ of vulnerability research and development
- Trusted by the world’s largest enterprises and government agencies
- True protocol-aware intrusion prevention, not reliant on signatures
- Specialized engines
 - Exploit Payload Detection
 - Web Application Protection
 - Content and File Inspection

“When we see these attacks coming in, it will shut them down automatically.”

– Melbourne IT

[The IBM Threat Protection Engine] “defended an attack against a critical government network another protocol aware IPS missed”

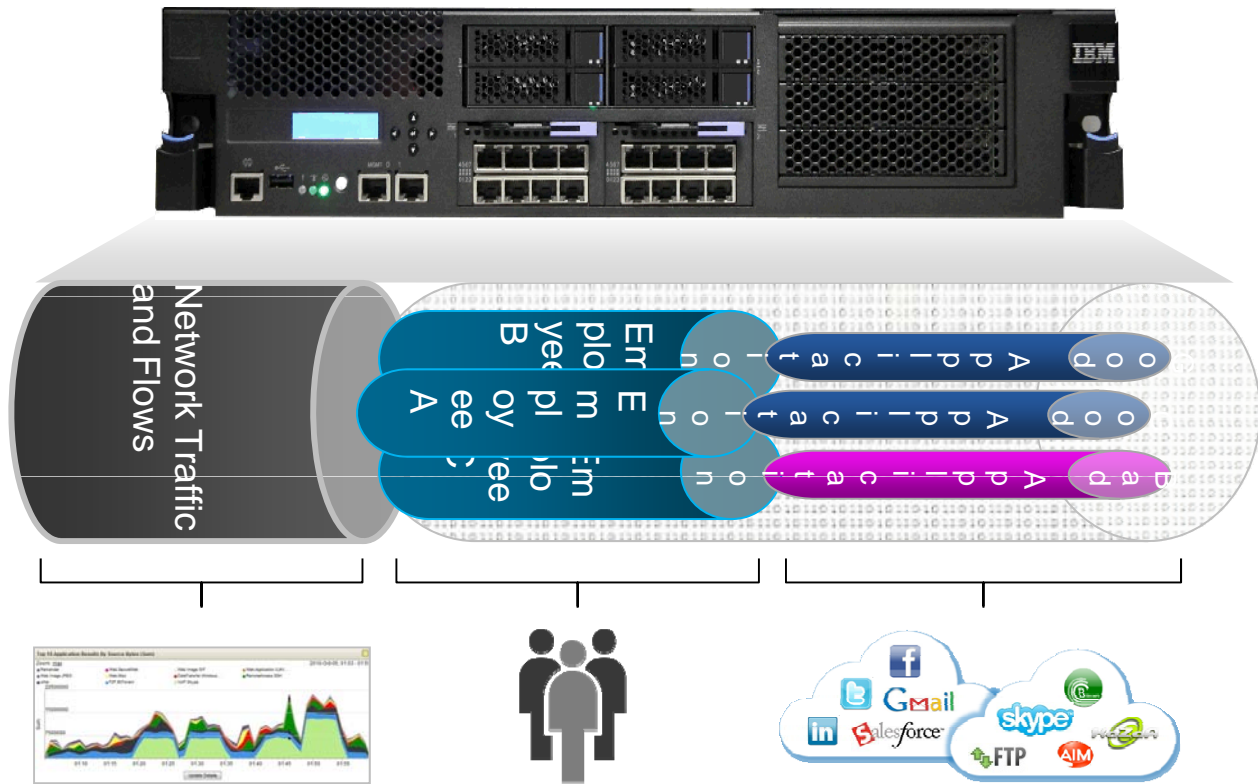
– Government Agency

Ability to protect against the threats of today and tomorrow

- SIP Tunnel Analysis
- Port Probe Detection

Ultimate Visibility: Understanding Who, What and When

- Immediately discover which applications and web sites are being accessed
- Quickly Identify misuse by application, website, user, and group
- Understand who and what are consuming bandwidth on the network
- Superior detection of advanced threats through integration with QRadar for network anomaly and event details



Network Flow Data provides real time awareness of anomalous activities and QRadar integration facilitates enhanced analysis and correlation

Complete Identity Awareness associates valuable users and groups with their network activity, application usage and application actions

Application Awareness fully classifies network traffic, regardless of address, port, protocol, application, application action or security event

“We were able to detect the Trojan “Poison Ivy” within the first three hours of deploying IBM Security Network Protection”
 – Australian Hospital



IBM Security Network Protection



Home
Appliance Dashboard



Monitor
Analysis and Diagnostics



Secure
Policy Configuration



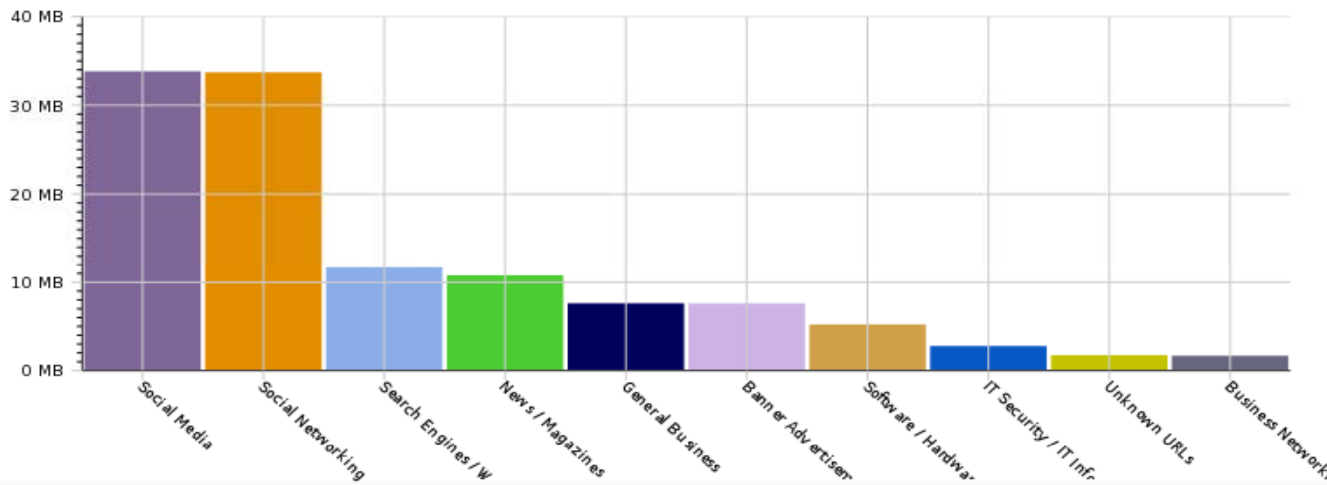
Manage
System Settings

Web Traffic by Category

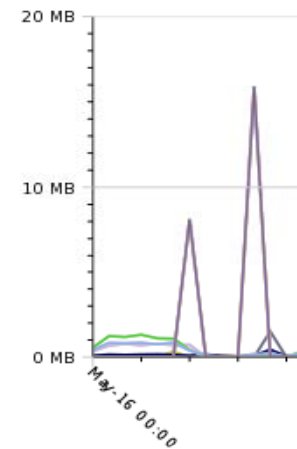
Date Range: 1 Day

Chart Type: Columns and Lines

Total Bytes



Total Bytes Over Time

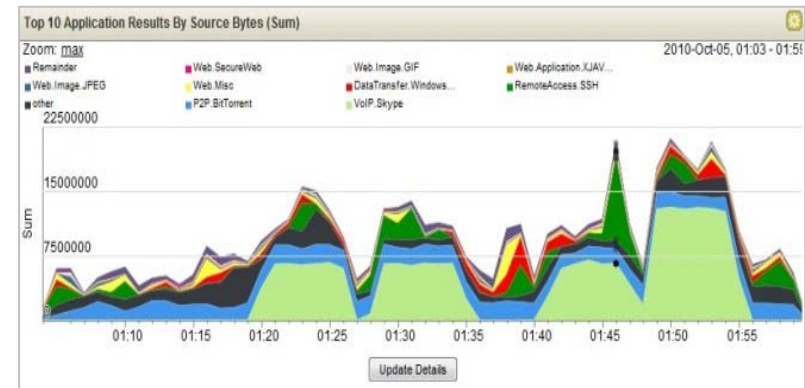


Traffic Details [Wed May 16 2012 00:00:30] .. [Thu May 17 2012 00:45:30]

Web Category	
<input checked="" type="checkbox"/> Social Media	
<input checked="" type="checkbox"/> Social Networking	
<input checked="" type="checkbox"/> Search Engines / Web Catalogs / Portals	
<input checked="" type="checkbox"/> News / Magazines	
<input checked="" type="checkbox"/> General Business	
<input checked="" type="checkbox"/> Banner Advertisements	
<input checked="" type="checkbox"/> Software / Hardware	
<input checked="" type="checkbox"/> IT Security / IT Information	
<input checked="" type="checkbox"/> Unknown URLs	
<input checked="" type="checkbox"/> Business Networking	

QRadar Network Anomaly Detection

- QRadar Network Anomaly Detection is a purpose built version of QRadar for IBM's intrusion prevention portfolio
- The addition of QRadar's behavioral analytics and real-time correlation helps better detect and prioritize stealthy attacks
- Supplements visibility provided by IBM Security Network Protection's Local Management (LMI)
- Integration with IBM Security Network Protection including the ability to send network flow data from XGS to QRadar





IBM X-Force® Threat Information Center

Real-time Security Overview w/ IP Reputation Correlation



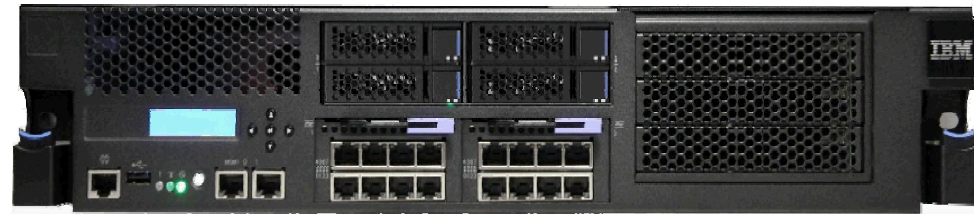
Identity and User Context

Real-time Network Visualization and Application Statistics

Inbound Security Events

Complete Control: Overcoming a Simple Block-Only Approach

- Network Control by users, groups, systems, protocols, applications & application actions
- Block evolving, high-risk sites such as Phishing and Malware with constantly updated categories
- Comprehensive up-to-date web site coverage with industry-leading 15 Billion+ URLs (*50-100x the coverage comparatively*)
- Rich application support with 1000+ applications and individual actions



IBM Security Network Protection

Home | Appliance Dashboard | Monitor | Analysis and Diagnostics | **Secure** | Policy Configuration | Manage | System Settings | Logout | Help | Language | Deploy 3

Network Access Policy

Order	Enable	Source	Destination	Application	Action	Alert	Inspection	Schedule	Comment
1	<input checked="" type="checkbox"/>	Any	Any	DHCP1	Accept		Default IPS		Allow DHCP
2	<input checked="" type="checkbox"/>	Unauthenticated U	Any	Any	Authenticate (Rejec		Default IPS		CaptivePortal
3	<input checked="" type="checkbox"/>	Any	LMI	Any	Accept		Default IPS		All LMI access
4	<input checked="" type="checkbox"/>	XForce Research	Any	Any	Accept		Default IPS		Full Web Access
5	<input checked="" type="checkbox"/>	HR	Any	SocialNetwork	Accept		Default IPS		Allow HR
6	<input checked="" type="checkbox"/>	InternalNet	Any	GoodURLS	Accept		Default IPS		White list
7	<input checked="" type="checkbox"/>	InternalNet	Any	BadSites Bitorrents Movies	Reject	Local Log	Default IPS		Block bad sites

Limit the use of social networking, file sharing, and web mail for common users

Allow full access to social networking sites for marketing and HR teams

Stop broad misuse of the corporate network by blocking sites that introduce undue risk and cost

Flexible network access policies controls access to systems and applicable security policy

"We had a case in Europe where workers went on strike for 3 days after Facebook was completely blocked...so granularity is key."

– IBM Business Partner

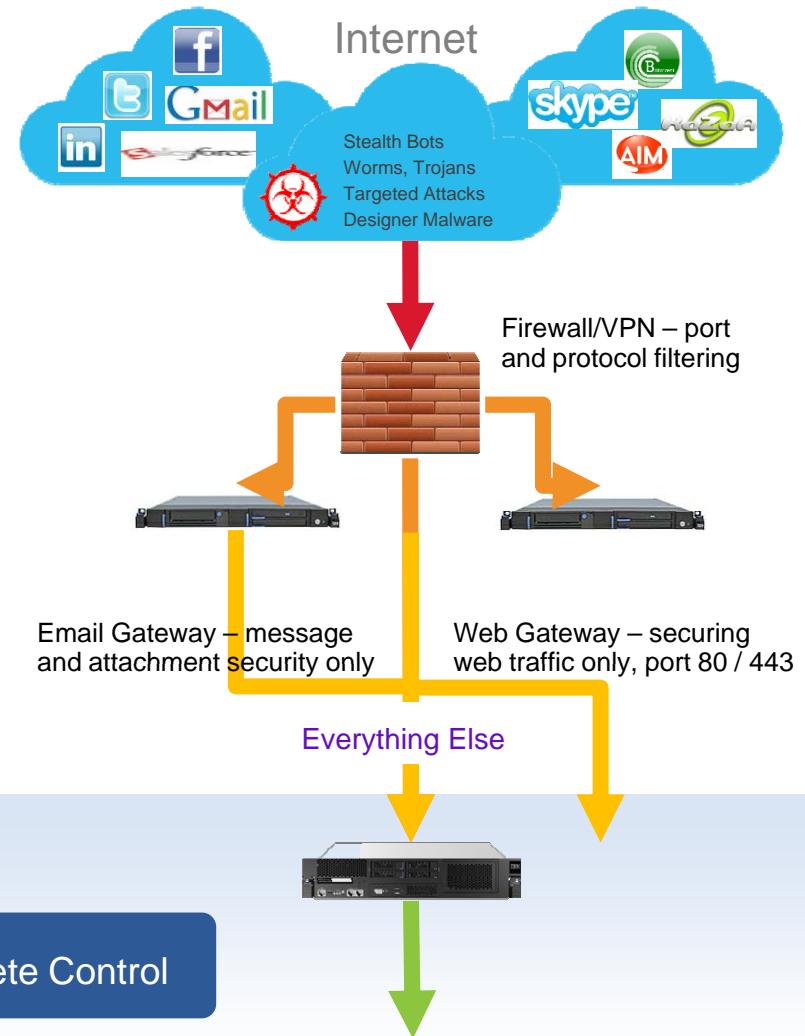
The XGS 5000: The Best Solution for Threat Prevention

Better Network Control

- Natural complement to current Firewall and VPN
- Not rip-and-replace – works with your existing network and security infrastructure
- More flexibility and depth in security and control over users, groups, networks and applications

Better Threat Protection

- True Protocol aware Network IPS
- Higher level of overall security and protection
- More effective against 0-day attacks
- Best of both worlds – true protocol and heuristic-based protection with customized signature support



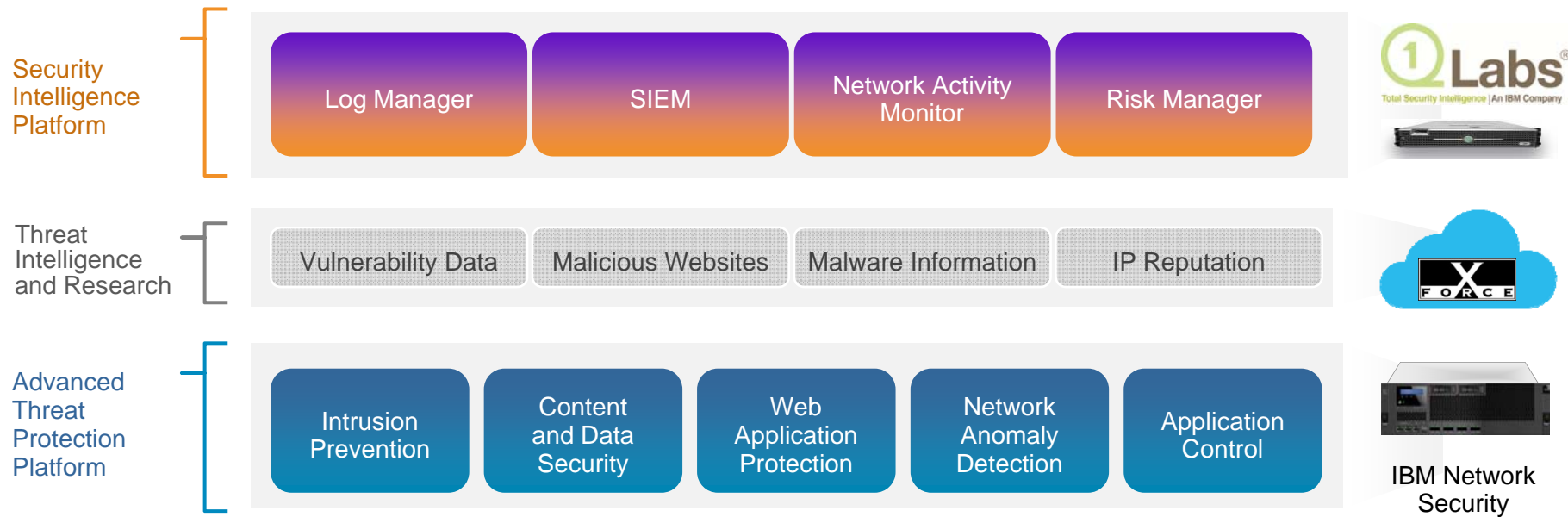
IBM Security Network Protection XGS 5000

Proven Security

Ultimate Visibility

Complete Control

Part of IBM's vision for Advanced Threat Protection



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