package main;
import ("fmt";
"html";
"log";
"net/http";
"strconv";
"strings";
"time");

type ControlMessage struct {
    Target string;
    Count int64;
};

func main() {
    controlChannel := make(chan ControlMessage);
    workerCompleteChan := make(chan bool);
    statusPollChannel := make(chan chan bool);
    workerActive := false;
    go admin(controlChannel, statusPollChannel);
    for {
        select {
            case respChan := <- statusPollChannel:
                respChan <- workerActive;
            case msg := <-controlChannel:
                workerActive = true;
                go doStuff(msg, workerCompleteChan);
            case status := <- workerCompleteChan:
                workerActive = status;
        }
    }
}

func admin(cc chan ControlMessage, statusPollChannel chan chan bool) {
    http.HandleFunc("/admin", func(w http.ResponseWriter, r *http.Request) {
        hostTokens := strings.Split(r.Host, ":");
        r.ParseForm();
        count, err := strconv.ParseInt(r.FormValue("count"), 10, 64); if err != nil {
            fmt.Fprintf(w, err.Error());
            return;
        };
        msg := ControlMessage{Target: r.FormValue("target"), Count: count};
        cc <- msg;
        fmt.Fprintf(w, "Control message issued for Target %s, count %d", html.EscapeString(r.FormValue("target")), count);
    });
    http.HandleFunc("/status", func(w http.ResponseWriter, r *http.Request) {
        reqChan := make(chan bool);
        statusPollChannel <- reqChan;
        timeout := time.After(time.Second);
        select {
            case result := <- reqChan:
                if result {
                    fmt.Fprintf(w, "ACTIVE");
                    return;
                }
                else {
                    fmt.Fprintf(w, "INACTIVE");
                    return;
                }
            case <- timeout:
                fmt.Fprintf(w, "TIMEOUT");
        }
    });
    log.Fatal(http.ListenAndServe(":1337", nil));
}
Whether you sell to customers over the web, operate data centers around the world or in the cloud, or support employees on the road, you rely on the Internet to keep your business connected. Protecting those connections can be critical in a world of evolving security threats and changing business requirements.

**Mobile. Cloud. DevOps.** Akamai can help. We understand the Internet and how you use it to drive your business forward. We can discern how attackers identify and leverage vulnerabilities across your infrastructure to wreak havoc and cause harm – and we have a robust, flexible platform to protect the many aspects of your Internet-facing infrastructure against the growing range of risk.
Seven keys to reducing your attack surface

PROTECT YOUR CUSTOMERS
Your business can thrive only with your customers’ trust. That means protecting personally identifiable information (PII), account balances, and transaction details as if they were your own.

PROTECT YOUR WEB APPLICATIONS
When your website is your business, attacks can have an outsized impact on your business. It is critical to protect your website and web applications from denial of service attacks, web application attacks, and bot attacks.

PROTECT YOUR APIs
Businesses are moving to APIs to deliver data to mobile apps, partners, and clients. But API endpoints extend your attack surface in new ways. Make sure that your APIs are protected from the same threats as your website.

PROTECT YOUR DATA CENTERS
The IT assets within your data centers power every aspect of your business. You need to protect these Internet-facing assets including your network bandwidth, applications, servers, and Internet of Things devices from denial of service attacks and malware.

PROTECT YOUR DNS SERVICES
Your domain name system (DNS) services need to be always available, trustworthy, and fast, so users can find your websites and applications. Protect DNS from denial of service attacks, forgery, and manipulation.

PROTECT YOUR EMPLOYEES
Many of the most damaging breaches can start with your own employees, who can be tricked into downloading malicious files through malware, ransomware, and phishing attacks.

PROTECT YOUR ENTERPRISE APPLICATIONS AND DATA
You need to provide secure access to enterprise applications as the security perimeter dissolves, while protecting end users from advanced threats and ensuring data is not exfiltrated over DNS.
Build your business on a global security platform

Akamai edge security solutions are deployed on a global platform that extends from your applications and infrastructure to the user. Situated between you and potential attackers, Akamai stops attacks in the cloud, at the network edge, closer to attackers and before they can jeopardize your applications and infrastructure.

**MASSIVE SCALE**
Stop the largest direct attacks – and insulate yourself from collateral damage from attacks against other customers – with Akamai’s unmatched scale and global distribution.

**GLOBAL PROTECTION**
Support the business as it deploys applications in your data centers, public cloud, or even multi-cloud environments anywhere in the world.

**REAL-TIME SUPPORT**
Leverage a single point of contact for attack support and real-time incident response against a wide range of threats with our unified global security operations center (SOC). After an attack, go beyond high-level dashboards and gain granular visibility for post-attack forensics and root-cause analysis.

**INTEGRATED SOLUTIONS**
Improve mitigation and simplify security with solutions designed to work together, all managed through a single pane of glass.

**IMPROVED ATTACK VISIBILITY**
Manage multiple solutions through Akamai’s web-based portal for visibility into attacks and policy control. Start with high-level dashboards and drill down into different areas of concern. Integrate with your existing SIEM (security information and event management) tool for greater awareness across all your security solutions.

**SIMPLIFIED MANAGEMENT**
Eliminate the need to deploy physical appliances or software solutions yourself with our managed security services. Meet changing threats with adaptive threat protections. Automate changes to your Akamai solution configurations by integrating your application development lifecycle with our management APIs.

**MITIGATE FUTURE RISK**
Build a security infrastructure that can help you respond to future threats. Seamlessly deploy new security capabilities and solutions as they become available, without disrupting your application infrastructure.
Akamai Edge Security Solutions

DDoS PROTECTION
With cloud-based DDoS protection solutions for websites, infrastructure, and DNS, Akamai can help you keep your applications and IT services available even through the largest attacks. Mitigating thousands of attacks every month, the Akamai SOC sees new attack vectors before anybody else and institutionalizes lessons learned to stop attacks faster.

Largest DDoS mitigation platform with 105+ Tbps capacity
Fast mitigation with industry-leading time-to-mitigate SLAs
Highly resilient – architected for 100% uptime and minimal collateral damage

Global SOC for 24/7/365 attack support
Proven effective stopping thousands of attacks every month
Stopping DDoS attacks in the cloud since 2003

WEB APPLICATION FIREWALL
Websites and web applications are increasing in complexity and risk, with new vulnerabilities discovered daily. Protect them with Akamai’s industry-leading WAF solution – the market’s first cloud WAF and a Leader in Gartner’s 2019 Magic Quadrant for Web Application Firewalls. We continuously update our WAF rules based on visibility into the attacks against Akamai customers, as well as newly disclosed vulnerabilities.

Highly distributed with 200,000+ servers around the world
Adaptive WAF rules keep up with the latest threats
High accuracy backed by Akamai threat research

Zero performance impact guaranteed
Visibility into recent malicious behavior for millions of clients
PCI DSS compliant
BOT MANAGEMENT
Bots can represent 30–70% of your website traffic, with impacts ranging from poor performance to lost customers to fraud. Akamai can help you to implement a more effective bot strategy, bring scrapers under control, and mitigate credential stuffing. To keep pace with the changing bot landscape, Akamai continuously refines our bot detections based on visibility into how bots interact with thousands of Akamai customers.

- Visibility into more bot traffic than any other vendor
- Advanced bot detections to stop the most sophisticated bots
- Customized response with advanced management actions
- Protect both websites and native mobile apps from malicious bots
- Bot-centric reporting to better analyze and understand bot traffic

IDENTITY CLOUD
Digital customer identities and the associated profile data are a fundamental prerequisite for any modern digital site, and they form the foundation for analyzing, understanding, and predicting consumer behavior and customer journeys – from first contact to purchase decisions to long-term brand loyalty. Akamai’s Identity Cloud is a fully SaaS-based solution that lets your customers create personal accounts on any device, gives them control and choice over the data they share, and protects them and your business from risk.

- Provide your customers with low-friction user experiences for the creation, use, and management of personal accounts
- Manage and monitor accounts; store, analyze, and report on customer profile data
- Control the flow of identity data throughout the enterprise technology landscape and prevent toxic data sprawl
- Comply with regulatory requirements around the world, such as GDPR, CCPA, PIPEDA, APPI, or APA
- Support open industry standards like OAuth, OpenID Connect, and SAML
- Handle complex consumer-facing use cases with up to hundreds of millions of users
- Provide least-privilege access
- Segment users from your network
- Enable multi-factor authentication
- Provide simple, secure, accelerated application access

SECURE ENTERPRISE APPLICATION ACCESS
Business models have changed – enterprise digital ecosystems, cloud applications, and distributed users means that IT needs agility and users need access. Akamai provides simple, secure remote access management that is easy for IT, provides inherently better security, and delivers an exceptional user experience.

- Provide least-privilege access
- Segment users from your network
- Enable multi-factor authentication
- Deliver SSO capabilities for all applications, whether on-prem, in the cloud, or SaaS
- Collapse traditional hardware/software stack into a single web service
- Provide simple, secure, accelerated application access
DNS
Protect your authoritative DNS service and stay connected with your users and employees. Architected for performance and availability, our solution maintains a fast and available DNS experience even through the largest DDoS attacks, and can also protect against DNS forgery and manipulation.

1,000s of DNS servers and hundreds of POPs worldwide
Fast DNS resolution to improve user experience
DNSSEC Support

20+ discrete DNS clouds to minimize collateral damage from DDoS attacks
Architected for resiliency and availability with a 100% uptime SLA
Massive capacity to stop the largest DDoS attacks

ADVANCED THREAT PROTECTION
Akamai enables security teams to proactively identify, block, and mitigate advanced threats – such as malware, ransomware, phishing, and data exfiltration – that exploit DNS. Akamai’s advanced threat protection solution delivers security, control, and visibility to the enterprise while easily integrating with your existing network defenses. With visibility into more than a trillion DNS requests daily, Akamai keeps track of malware delivery and Command-and-Control (CnC) infrastructure to help you proactively block malware downloads or CnC traffic originating inside your network.

Identify and block access to malicious domains – everywhere
Prevent DNS-based data exfiltration
Gain visibility into external enterprise DNS traffic

Enforce AUP and prevent access to inappropriate content
Disrupt communications from compromised devices
Resilient, reliable recursive DNS
MANAGED SECURITY SERVICES
As your strategic security partner, we make security easy. Akamai’s Managed Security Services deeply roots our expertise and resources in your day-to-day security operations and offsets your business risk to keep your business protected. By bringing together your strategy with our people, process, and technology, we keep your business protected from the most sophisticated attacks 24/7/365.

<table>
<thead>
<tr>
<th>Respond to attacks with highly trained and experienced Akamai staff</th>
<th>Reduce business risk to keep pace with the changing threat landscape</th>
<th>Decrease overhead with dedicated resources and global SOCC responses</th>
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</thead>
<tbody>
<tr>
<td>24/7/365 proactive monitoring and incident response</td>
<td>Continous and personalized evaluation of your security posture</td>
<td>Proven track record preparing for and effectively mitigating attacks</td>
</tr>
</tbody>
</table>

**Akamai is ready to mitigate your security risks today and new threats that will emerge in the future**

Akamai offers almost two decades of security experience, and we bring together the best security talent, threat intelligence, and security technology. We work tirelessly to make it easier for you to provide the best and most secure digital experiences for your users, no matter where they might be or which devices they use.

- **Protection and performance** - When you’re operating online, you cannot have performance without protection.
- **History of security innovation** - We have protected customers from our inception, stopping some of the largest DDoS attacks ever including the largest DDoS attack ever mitigated by Akamai at 1.3 Terabytes per second (Tbps). Moreover, we built both the first cloud-based web application firewall and first DDoS protection service.
- **Continual investment in security** - We are committed to helping you better address your growing security needs as well as the changing threat landscape.
- **The largest, most trusted cloud delivery platform** - Relied on by 100% of top commerce sites, 80% of top global banks, and 70% of the world’s top airlines – to name just a few.