



Welcome

connect. transform. repeat.

Questions? Please contact lizl@mobiustransform.com or call 281.469.3801.



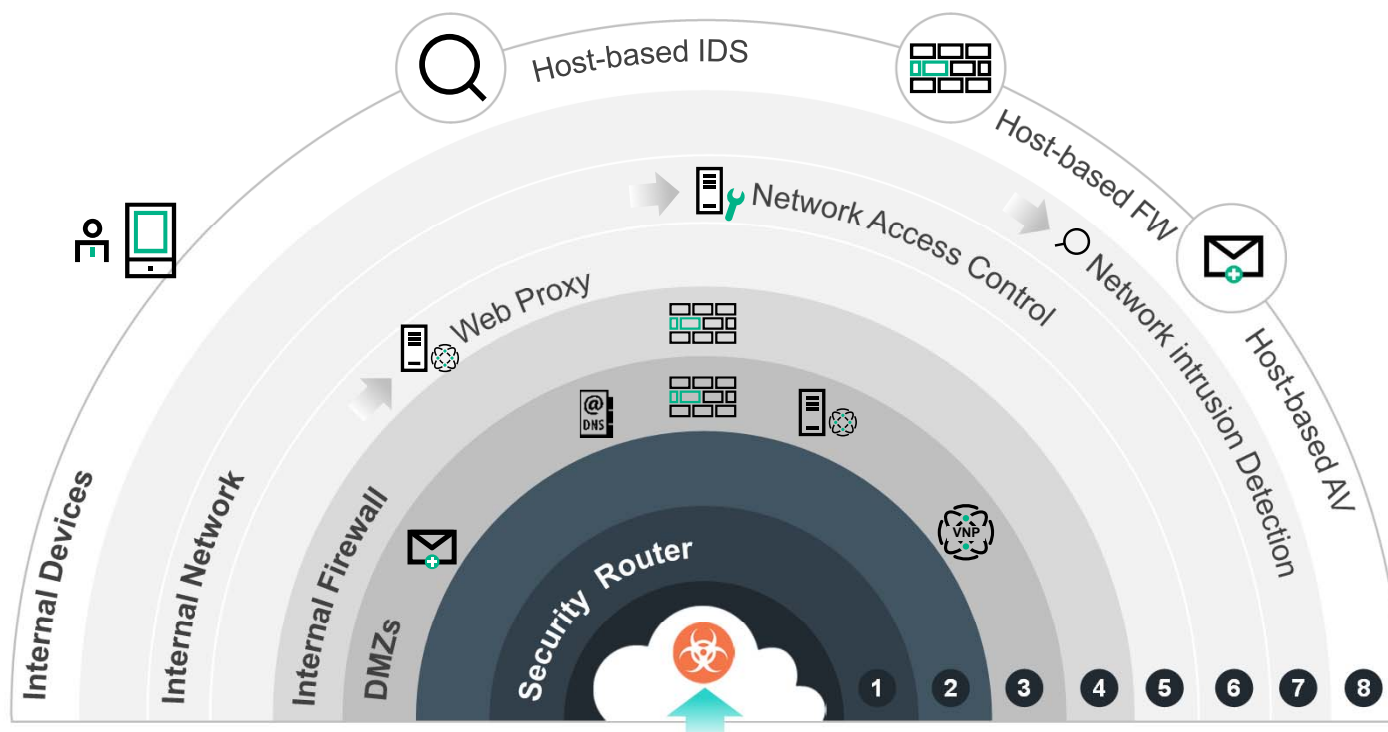
Hewlett Packard
Enterprise

HPE Security

Fortify on Demand

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Existing network and perimeter based security is insufficient

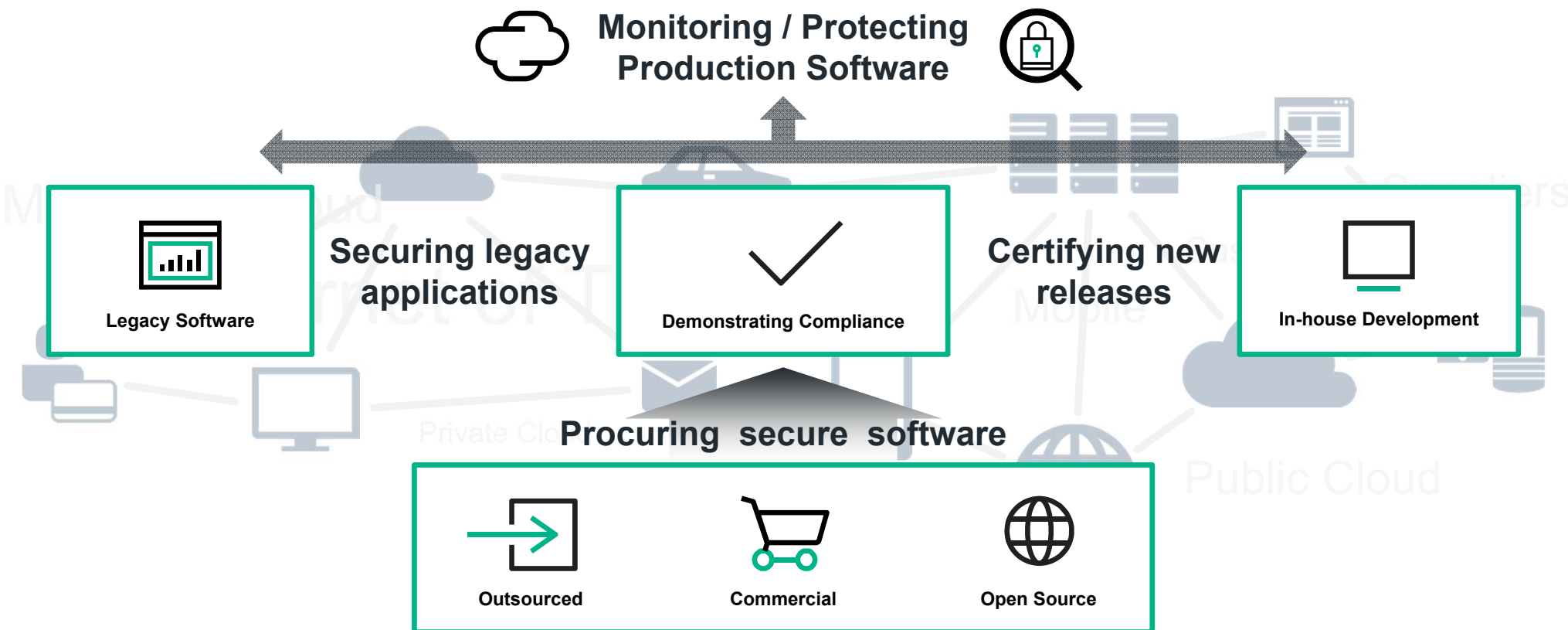


84% of breaches exploit vulnerabilities in the application layer

Yet the ratio of spending between perimeter security and application security is **23-to-1**

- Gartner Maverick Research: Stop Protecting Your Apps; It's Time for Apps to Protect Themselves (2014)

The number of apps is growing
Increasing platforms and complexity ...many delivery models



A reactive approach to AppSec is inefficient and expensive



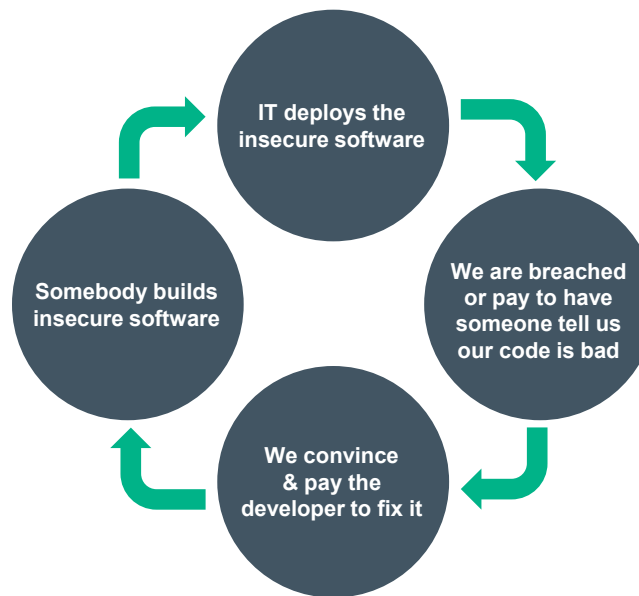
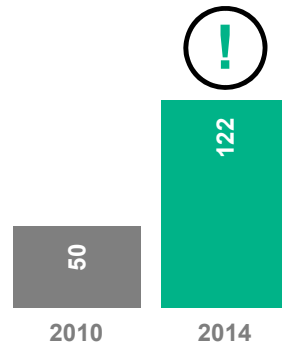
The Problem

Costs and incidence of attacks are high and growing.

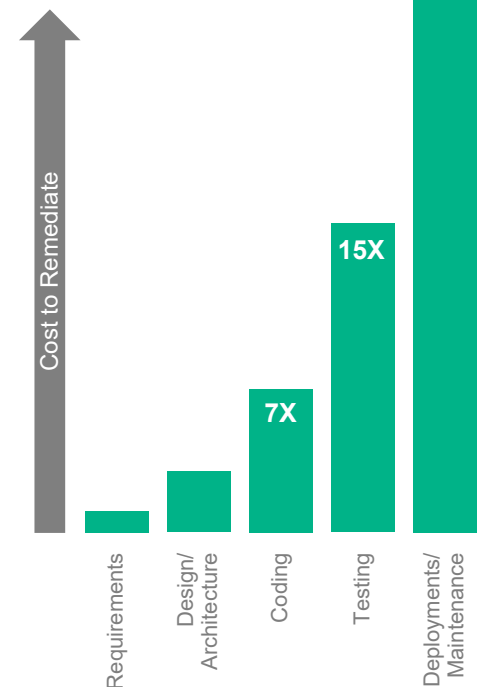
Average cost of cyber crime per company:
95% increase in 4 years



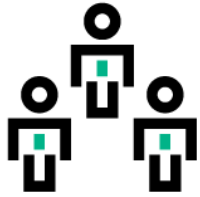
Number of successful attacks per year per company:
144% increase in 4 years



The ROI



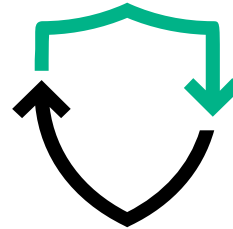
Customer Challenges



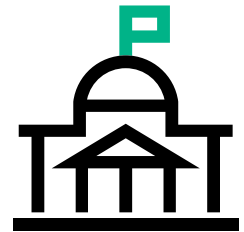
Difficult to
Train and
Retain Staff



Constantly
Changing
Environment



New
Attacks

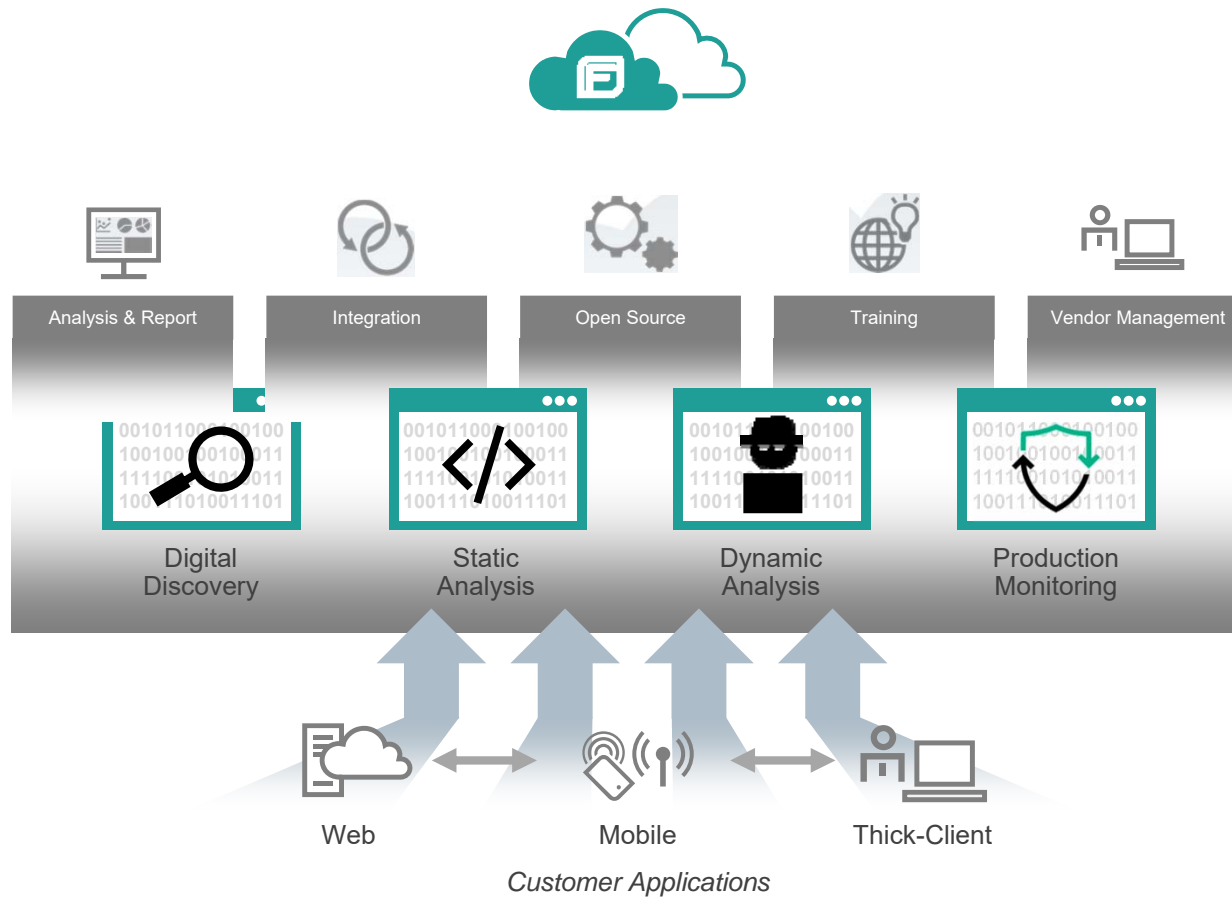


Compliance
Requirements



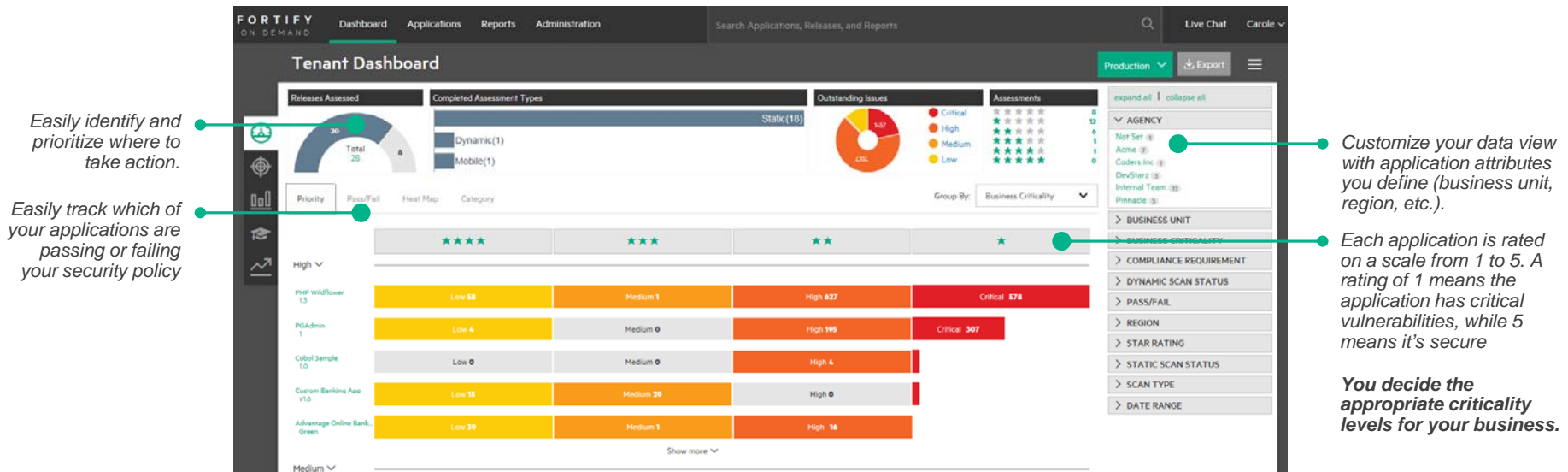
Fortify on Demand Overview

HPE Security Fortify on Demand



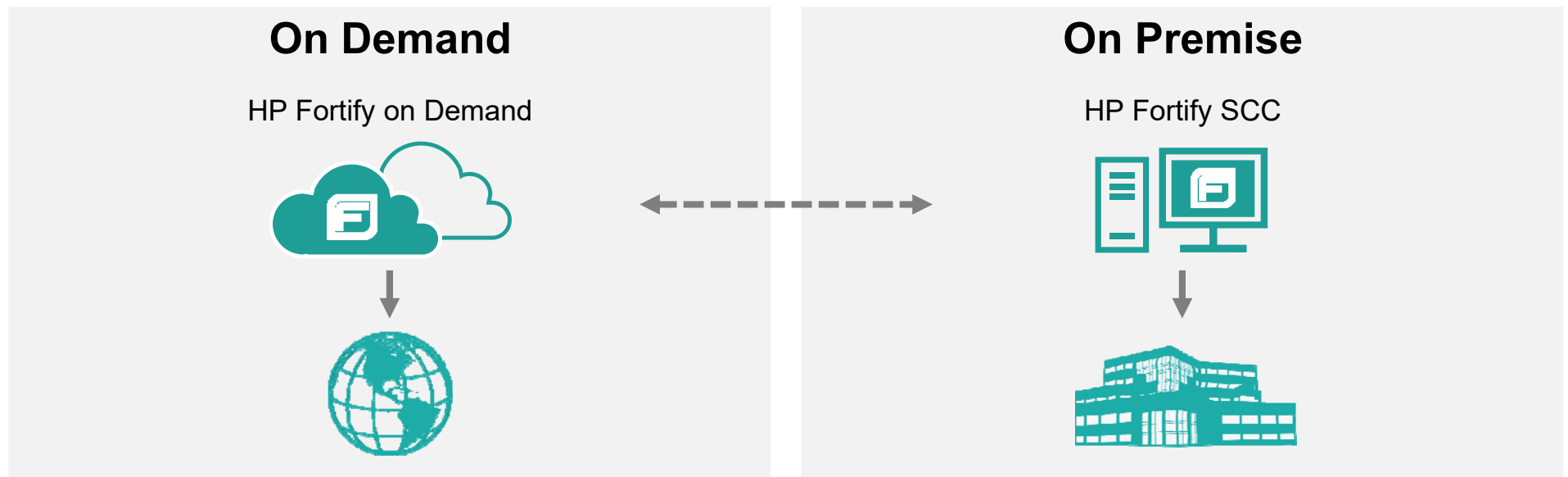
Cloud-based Portal

Single interface to manage your entire application security program




Application testing flexibility

Only vendor with a hybrid delivery model



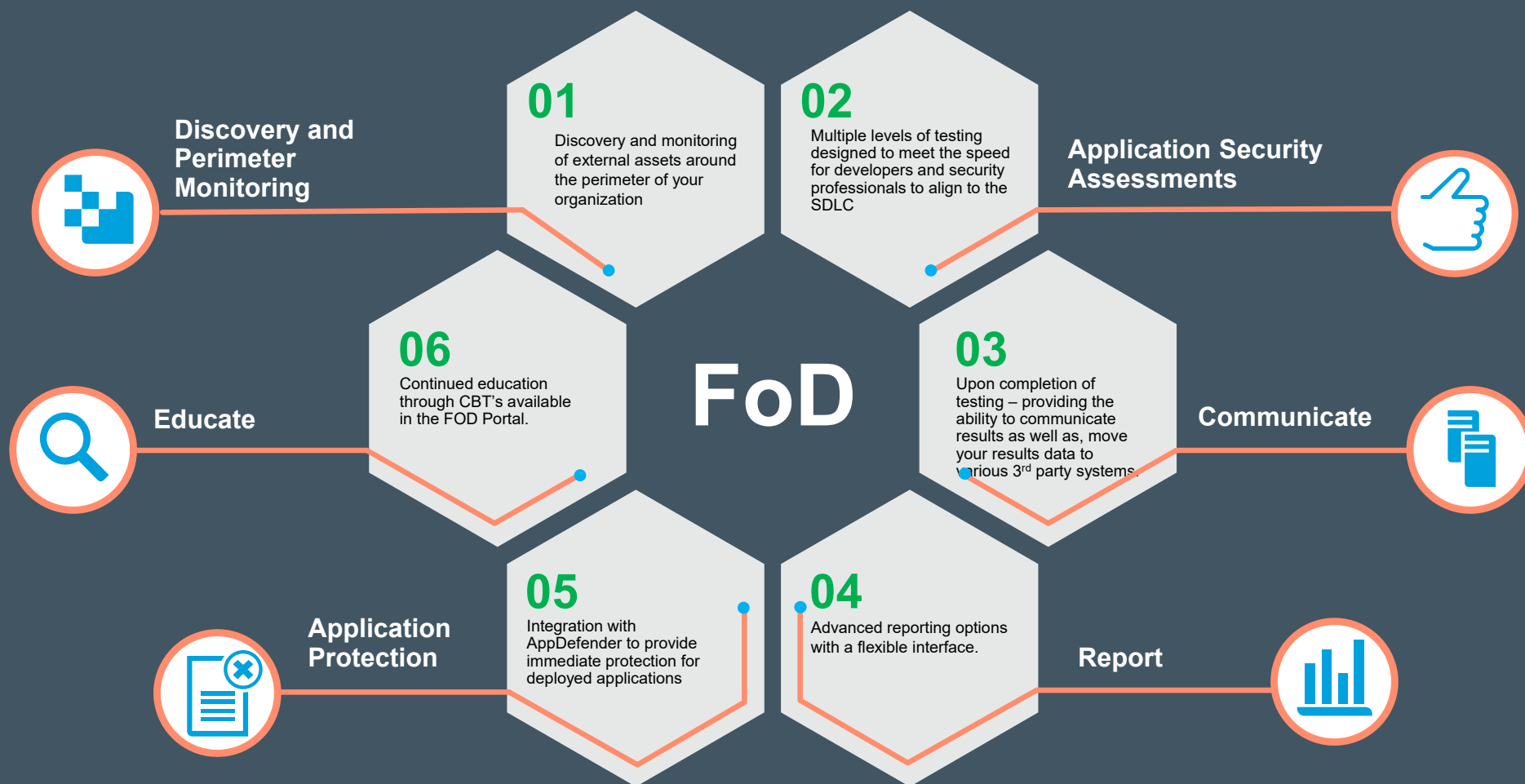
How we're different

- 
- Scans are backed by SLAs with financial penalties
 - We assign a Technical Account Manager to every account – at no additional cost
 - Mobile Reputation testing and database – free to all customers
 - Multiple global datacenters – 24/7 global support
 - Only provider to offer both “on-demand” and on premise solutions



Managing Your Application Security Program

Six steps to managing the risk within your organization



Digital Discovery and Perimeter Monitoring

Discover and Monitor

Assessment

Communicate

Report

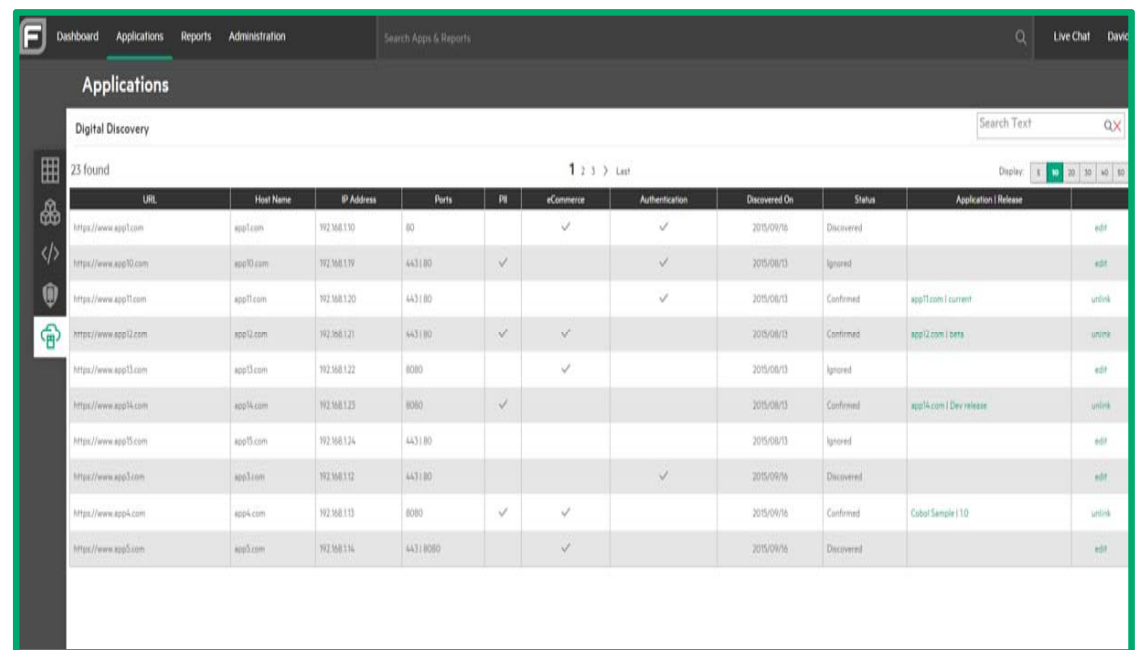
Protect

Educate

Digital Asset Discovery Process

- Create risk ranked inventory of on-line applications
 - Web, Facebook, mobile
 - In-house developed, out-sourced, third-party
- Basic risk categorization
- Lightweight vulnerability scan of all applications
 - See what the script-kiddies see
- Establish the business case
 - Gain executive sponsorship

Don't wait for a breach



The screenshot shows a web application interface titled 'Applications' with a 'Digital Discovery' section. It displays a table of 23 found applications. The table columns are: URL, Host Name, IP Address, Ports, PII, eCommerce, Authentication, Discovered On, Status, Application / Release, and an 'edit' link. The data rows show various applications like app1.com, app10.com, app11.com, app12.com, app13.com, app14.com, app15.com, app3.com, app4.com, and app5.com, with their respective IP addresses, ports, and discovery dates.

URL	Host Name	IP Address	Ports	PII	eCommerce	Authentication	Discovered On	Status	Application / Release	edit
https://www.app1.com	app1.com	192.168.1.10	80		✓	✓	2015/09/16	Discovered		edit
https://www.app10.com	app10.com	192.168.1.19	443/80	✓		✓	2015/08/13	Ignored		edit
https://www.app11.com	app11.com	192.168.1.20	443/80			✓	2015/08/13	Confirmed	app11.com current	unlink
https://www.app12.com	app12.com	192.168.1.21	443/80	✓	✓		2015/08/13	Confirmed	app12.com beta	unlink
https://www.app13.com	app13.com	192.168.1.22	8080		✓		2015/08/13	Ignored		edit
https://www.app14.com	app14.com	192.168.1.23	8080	✓			2015/08/13	Confirmed	app14.com Dev release	unlink
https://www.app15.com	app15.com	192.168.1.24	443/80				2015/08/13	Ignored		edit
https://www.app3.com	app3.com	192.168.1.12	443/80			✓	2015/09/16	Discovered		edit
https://www.app4.com	app4.com	192.168.1.13	8080	✓	✓		2015/09/16	Confirmed	Robot Sample 110	unlink
https://www.app5.com	app5.com	192.168.1.14	443/8080		✓		2015/09/16	Discovered		edit

Web Application Assessment Solutions

Discover and
Monitor

Assessment

Communicate

Report

Protect

Educate

Service Levels

- **Static**
 - Award winning static analysis solution
- **Dynamic**
 - Basic
 - Standard
 - Premium
- **Mobile**
 - Basic
 - Standard
 - Premium

Consumption Models

- Single Scan (One scan plus remediation)
- Subscription (Unlimited annual scans)

The screenshot shows the Fortify web application assessment dashboard. The top navigation bar includes 'Dashboard', 'Applications', 'Reports', and 'Administration'. The main section is titled 'Your Applications' and displays a table of 25 found applications. The table columns are: Application, Release, # Issues, Rating, Static, Dynamic, Mobile, and Last Completed. The applications listed are JG, Riches, Javalicious, PHP Workflow, Cobol Sample, PyLectid, PCAdmin, Drupal, Joomla, and Custom Banking App. The status of each application is indicated by a color-coded button: 'Start Scan' (green), 'Completed' (green), 'Cancelled' (red), or 'In Progress' (purple). The 'Last Completed' column shows the date of the last scan for each application.

Application	Release	# Issues	Rating	Static	Dynamic	Mobile	Last Completed
JG	210.0.GA	797	★★★★★	Cancelled	Cancelled	Not Started	2015/04/28
Riches	v1	297	★★★★★	Not Started	In Progress	Not Started	2015/04/28
Javalicious	1.0.1	3	★★★★★	Cancelled	In Progress	Not Started	2015/04/28
PHP Workflow	1.3	1264	★★★★★	Completed	In Progress	Not Started	2015/04/29
Cobol Sample	1.0	14	★★★★★	Completed	Not Started	Not Started	2015/04/29
PyLectid	0.8.7	88	★★★★★	Completed	Not Started	Not Started	2015/04/29
PCAdmin	1	506	★★★★★	Completed	Not Started	Not Started	2015/04/30
Drupal	7.25	6	★★★★★	Completed	Waiting	Not Started	2015/04/30
Joomla	3.2	347	★★★★★	Completed	Not Started	Not Started	2015/04/30
Custom Banking App	v1.6	48	★★★★★	Not Started	Not Started	Cancelled	2015/04/30

Reduce security by building better software

- ## Simple to use



Test

Review



Dynamic Testing

For QA and Production Testing – just point us at your URL

Dynamic Analysis	Basic	Standard	Premium
App Risk Level	Low Marketing Site	Medium Personally Identifiable	High Credit card / SSN
Automated Scan	✓	✓	✓
False Positive Removal	✓	✓	✓
Remediation Scan	✓	✓	✓
Manual Testing		✓	✓
Business Logic Testing			✓
Web Services			✓
Static Analysis/IAST/ Security Scope			✓



Hewlett Packard
Enterprise

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Mobile Testing

Mobile Analysis	Basic	Standard	Premium
Risk/Test Level	Low Marketing App	Medium Personally Identifiable	Sensitive Credit card / SSN
Automated Binary - Client		✓	✓
Source Code - Client	✓		✓
Manual Binary – Client		✓	✓
Network		✓	✓
Reputation/Behavioral Analysis		✓	✓
Server: Web Services - Dynamic		✓	✓
Server: Web Services – Source Code			✓
Turnaround	1-2 Days	1-2 Days	5 Days

Standard and Premium Cover all Categories of OWASP Mobile Top 10 2014

Integrations and Advanced Reporting

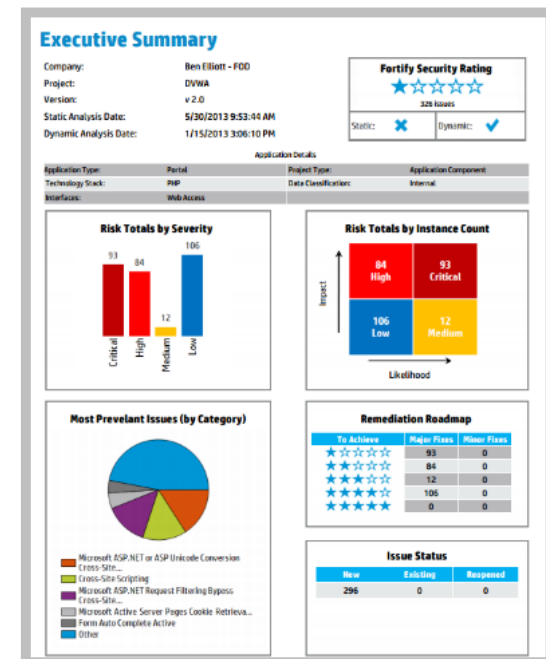


Communication

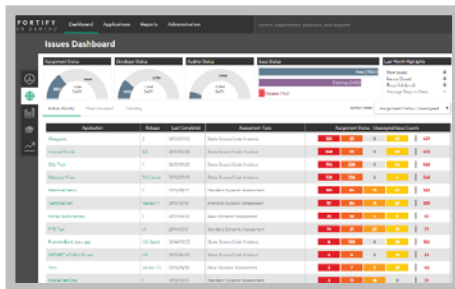
- Hybrid model
- Vendor Management Capabilities
- Out-of-the-box integrations (Jenkins, ALM, AppDefender, WAFs)
- Powerful Restful API for additional integrations and data export

Powerful Reporting Engine

- From Executive Summary to Full Details
- PCI, OWASP, etc.
- Easy to create reports
- Use existing templates or create-your-own
- 3rd Party application reporting



Powerful reporting and remediation guidance



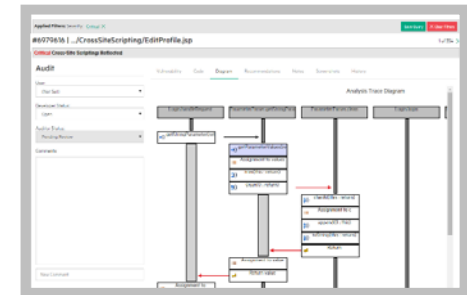
Insightful Dashboard

- Tenant
- Issues
- Usage
- Training



Detailed Reports

- Star Ratings
- Remediation roadmap
- Detailed vulnerability data
- Recommendations



Collaboration

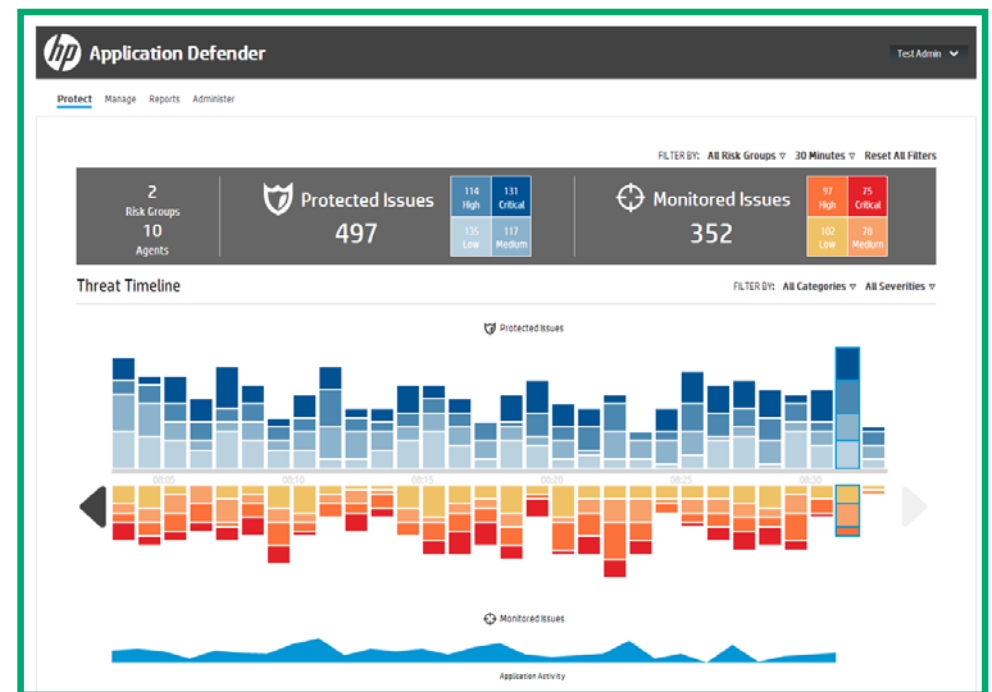
- Line of code details
- IDE Plugins
- Assign issues to developers
- Track remediation workflows

Application Protection



Application Self Protection

- **AppDefender to be integrated directly into FOD**
- **Quick** protection against attacks from within your application
- **Easy** identification of top vulnerability events by criticality
- **Accurate** results from within application logic and data flows



Role-based Secure Development Training

Discover and
Monitor

Assessment

Communicate

Report

Protect

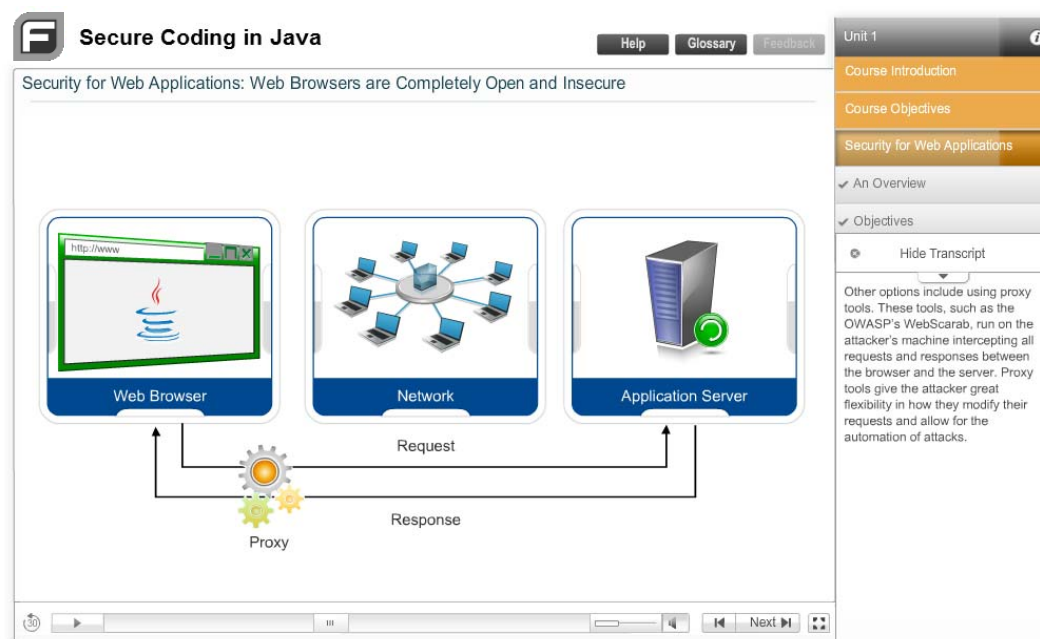
Educate

Role-based Training

- Developers
- .NET, Java, C/C++, PHP
- Mobile Developers
- iOS & Android
- Project Managers
- QA

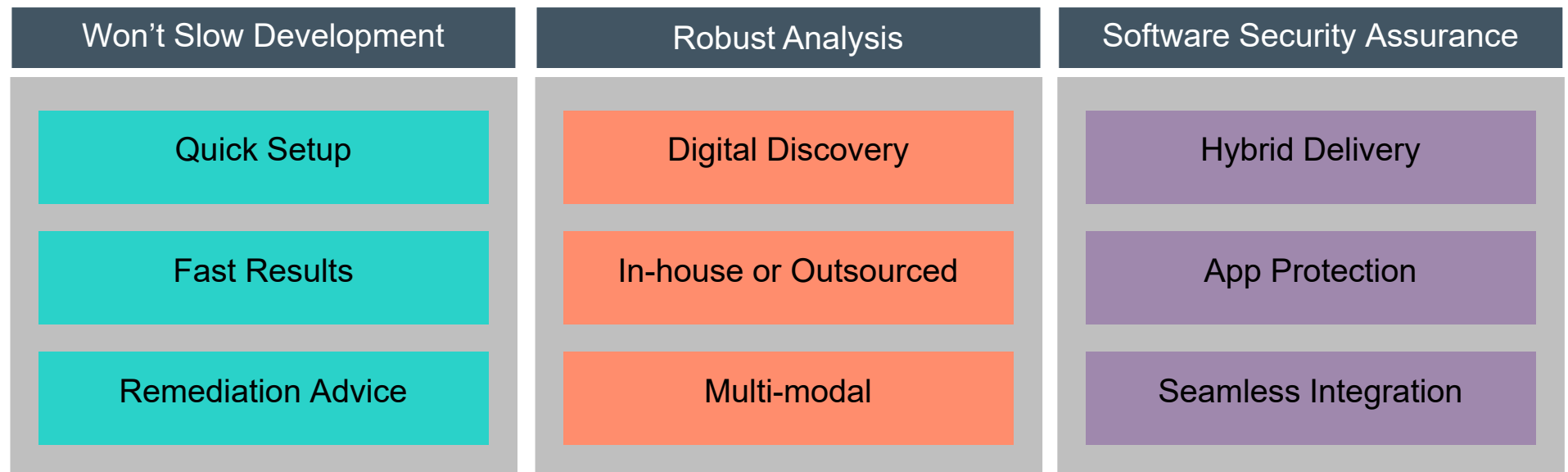
eLearning

- Low cost
- Easier to schedule
- Highly-scalable
- Easy to manage
- Easy to enforce



HPE Security Fortify on Demand

The right choice





Hewlett Packard
Enterprise

Thank you

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**Hewlett Packard
Enterprise**

Protect your digital enterprise

**Dan Schulte (St. Louis Cardinals Fan)
MBA/CISSP/CISM/CEH/CCSK
HP Security Strategist**

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Cardinals cyberattack on the Astros

The attack is the first known case of corporate espionage in professional sports.



Intellectual Property

Mr. Luhnow was a Cardinals executive, primarily handling scouting and player development. One of many innovative thinkers drawn to the sport by the statistics-based “Moneyball” phenomenon, he was credited with building baseball’s best minor league system, and with drafting several players who would become linchpins of that 2011 Cardinals team.

The Astros hired Mr. Luhnow as general manager in December 2011, and he quickly began applying his unconventional approach to running a baseball team. In an exploration of the team’s radical transformation, Bloomberg Business called it “a project unlike anything baseball has seen before.”

It contained the Astros’ “collective baseball knowledge,” according to a Bloomberg Business article published last year. The program took a series of variables and weighted them “according to the values determined by the team’s statisticians, physicist, doctors, scouts and coaches,”

What can we do now?

The new battlefield



Vanishing perimeter

Perimeter in your pocket

Defending interactions
between users, apps, and **DATA**

Patch or perish



Back to the basics

Unintended consequences

Vendor transparency

What can we do now?

Monetization of DATA



Ransomware

.....
ATM-malware

.....
Banking Trojans

Shifting politics

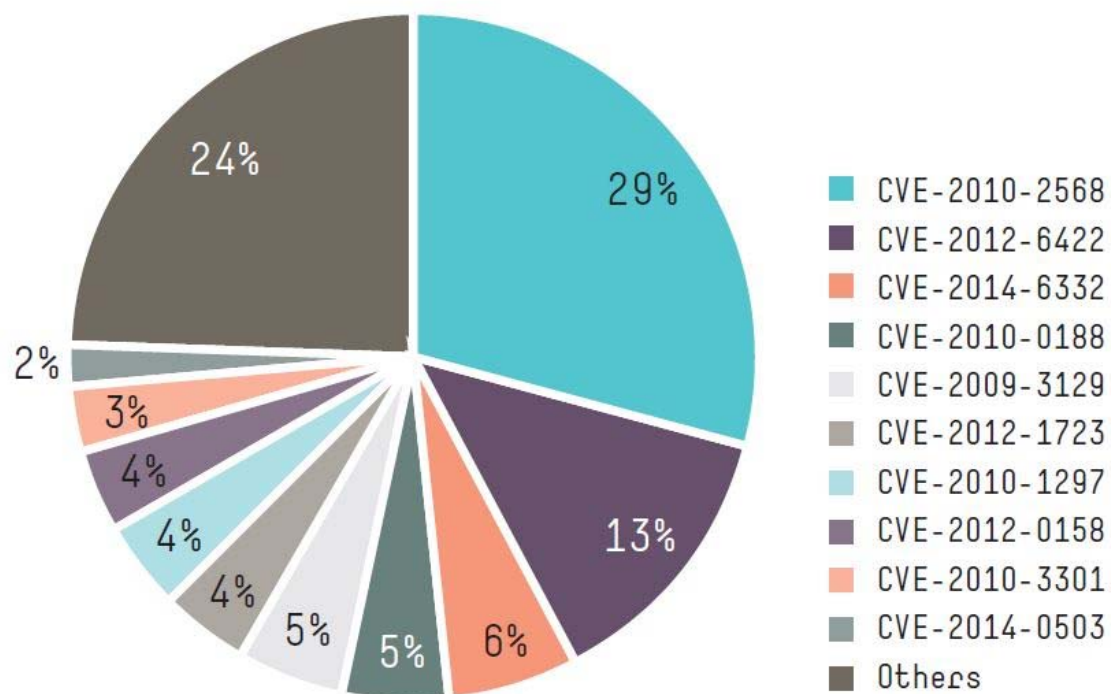


Cross-border agreements

.....
Privacy protection

.....
Protect our DATA

Successfully exploited vulnerabilities



29% used 2010 Stuxnet infection vector

Five repeat offenders
Top 10 are >1 yr old
70% > 3 yrs old

Adobe Flash accounts
for 29% of malware
samples



243+ days

Average time bad guys are inside **before detection**

2014 ...March April May June July August September October November December **2015** January February March...

of breaches occur at the **application layer**

84%

Since 2009, time to resolve an attack **has grown**

220%

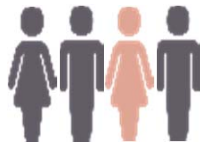
Average **Remediation**

UK 30 days (25 in 2014)

Global 46 days (43 in 2014)

94%

of breaches are reported by a **3rd party**



23% ROI Security Intelligence

21% ROI Encryption Technology

20% ROI Advanced controls



— UTM, NGFW, IPS

You need a set of core beliefs and principles
Here are ours



Core Belief

Protection must be **built into the fabric** of the digital ecosystem

Guiding Principles

Security is intended to **protect *and* enable** the business

Protect **what matters most** to you and the attackers:
your apps, users, data & the interactions between them

Every organization is unique: there is **no one size fits all** security program.
But there are **common, foundational components**

Build Security into the fabric of your organization



Build it In

Prevent

- HPE Security Data Security
- HPE Security Fortify
- HPE Aruba ClearPass

Stop it Now

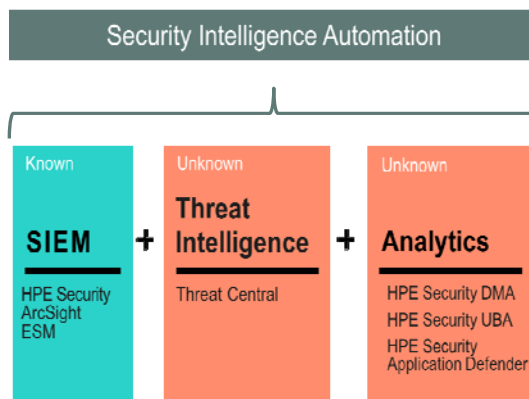
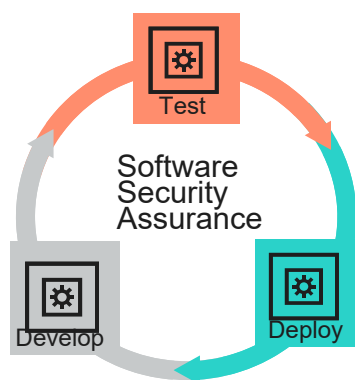
Detect & Respond

- HPE Security ArcSight
- HPE User Behavior Analytics
- HPE DNS Malware Analytics
- HPE Threat Central

Recover it Fast

Recover

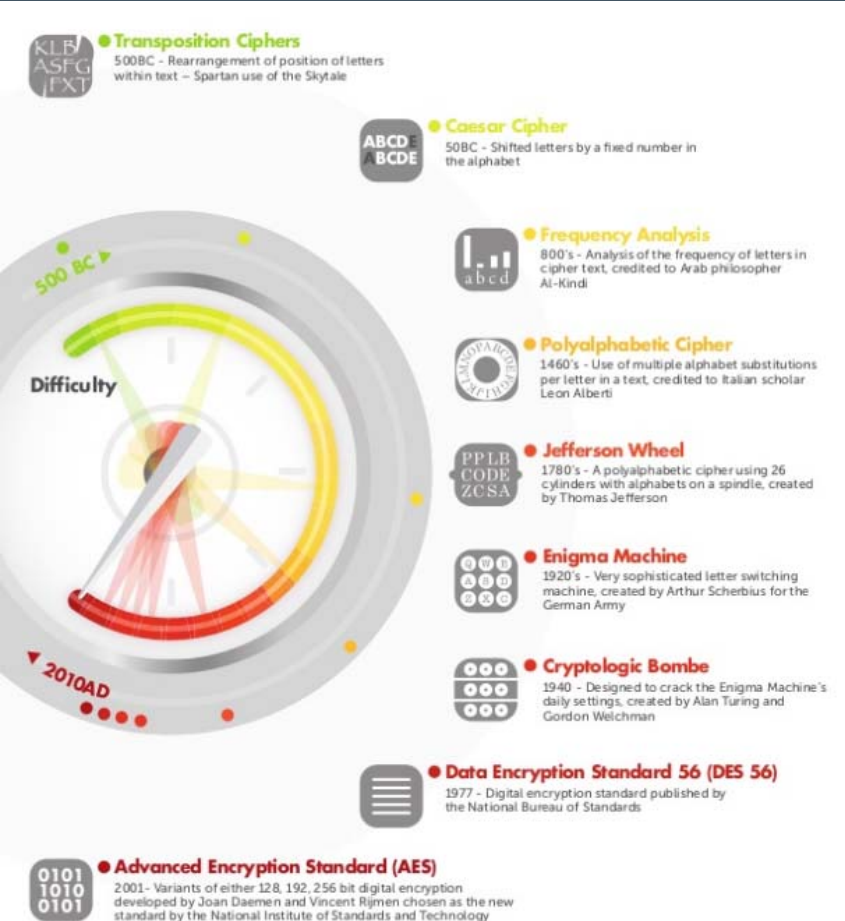
- HPE Security Services
- IM&G, EG and Technology Services



Backup, Recovery, Archiving & Global Incident Response



Protect your data



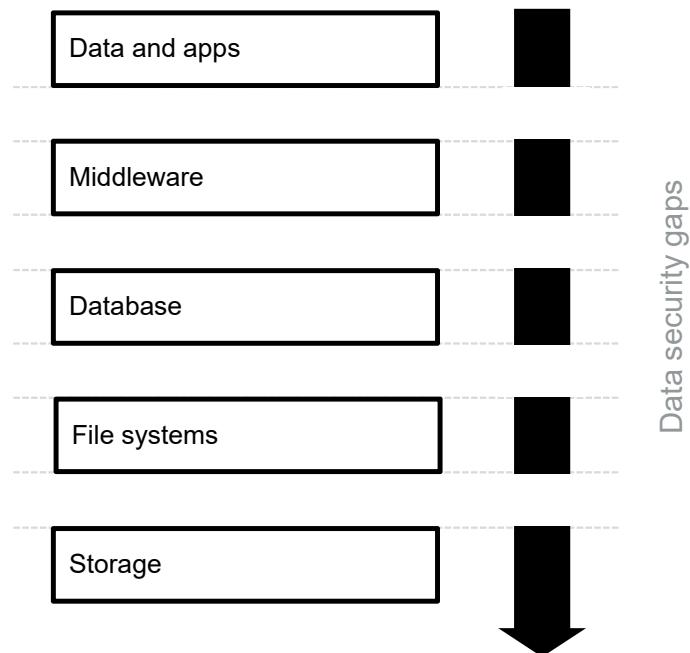
	Credit Card	Tax ID	Bank Account
	0012 3456 7890 0000	000-00-0000	800N2982K-22
FPE	2724 9283 2943 2838	982-28-7723	709G9242H-35
AES	8juYE62W%UWjaks&dDFeruga2345^WFL	lja&2924kUEF65%Qa rotugDF2390^32KNq	Hiu97NMko2^Ku}o{3 5RJ434DQNmnsDre

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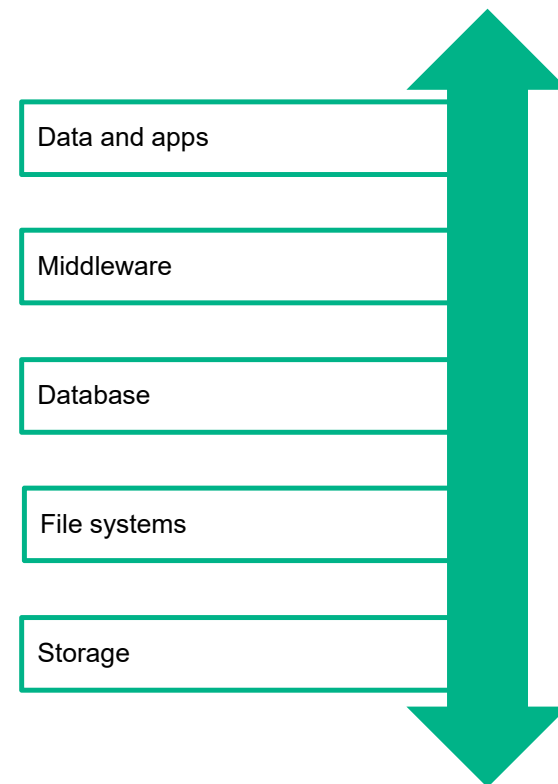
Build protection in Data Protection Across Private Cloud, Public Cloud and Traditional IT



Traditional Security



Data-centric Security



Protection while at rest, motion and in use

Global Automotive Manufacturer



Business Need

- Customer need to analyze real time data from vehicles, merged with large customer data sets. Reduce recall impact, enhance customer service
- Massive scale: Vehicles emitting 1-2 billion transactions per day – includes location data, VIN data, personal data
- Real time ingestion into Hadoop with Flume, Data merges with IBM DataStage
- Complex EDW “2.0” ecosystem – IBM BigInsights Hadoop, Teradata
- Analysts using Cognos, QlikView, Custom BI Tools
- Dynamic access to live data for investigations via Teradata, Cognos and other tools required after analysis



Solution

- HP SecureData Platform for Teradata, Hadoop, Open Systems
- Protecting multiple fields- GPS data, Vehicle data, sensor data, engine data, personal behavior data, accident databases, and under one EDW 2.0 platform
- HP SecureData integrated into Flume for automatic dynamic de-identification of data on real-time ingest – live feeds
- Full referential integrity from FPE across all systems
- Teradata and Hadoop UDFs for dynamic access to live data
- ODBC/JDBC real-time re-identification in BI tools

Outcome

- Enables Data scientists to operate on de-identified data – reduced risk and compliance
- FPE referential integrity preservation allows analytics across Teradata, Hadoop, Cognos etc. to be on de-identified data
- Plug and play for data science and BI tools – no app changes
- Enables manufacturer to see real-time behavior of customers and vehicles without privacy and breach risks

HPE Security – Data Security



A leading expert in data-centric encryption and tokenization solutions for 1,100 of the world's foremost enterprises:

- 8 of the 10 top U.S. banks
- 6 of the 7 top U.S. payment processors
- Top 5 global Internet retailers
- Top 5 auto manufacturers / energy
- U.S. Tier 1 home improvement retailer
- Fortune 50 healthcare benefits providers
- Global leaders in retail, insurance, healthcare and telecommunications
- Over 70 million HPE SecureMail users worldwide

“With HPE SecureData and HPE SecureData Web, our onsite QSA audit went from two weeks to three days, with remediation expenses shrinking by 50%, saving us over \$1 million annually.”

Global Internet Retailer

Selected customers:



And many more...

- PCI
- PII
- Analytics
- Test Data
- Cloud



Thank you! Survey and Q&A

connect. transform. repeat.

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