CYLANCE™
CONSULTING

PREVENTION AS A BUSINESS STRATEGY

BEN DENKERS
VP CONSULTING, NORTH AMERICA

SAFE HARBOR

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THE PRESENTER

BEN DENKERS

VP Consulting, North America

- 15+ years of security experience in pen testing, incident response, forensics, and security consulting
- Served as Managing Director of Enterprise Security Services and Worldwide Managing Director of Red Team Services
- Really I just I like to hack stuff.

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AGENDA

Why services? Magento Bug:
What we know and impacts to businesses

Combating Magento

Evolving to Prevention

MAGENTO: BY THE NUMBERS

Magento is one of the largest open source e-commerce platform used by small retailers and big companies.

98
MILLION

Estimated number of online shoppers to be served by Magento merchants by 2020[1]

$155
BILLION

Gross merchandise volume transacted on the platform annually[2]

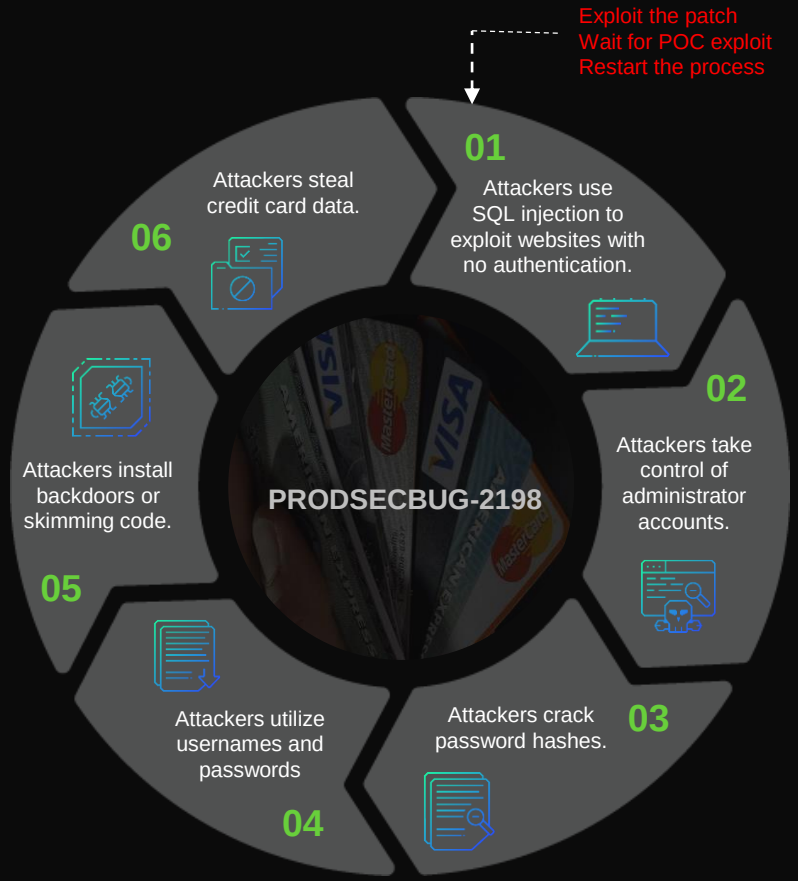
858K
WEBSITES

Number of customers that are Magento websites[3]

[1] https://magento.com/blog/magento-news/101-billion-digital-commerce-sold-merchants-using-magento-2016 / [2] https://magento.com/advantage / [3] https://trends.builtwith.com/shop/Magento

MAGENTO VULNERABILITY

- Has resided in Magento since version 1
- Unauthenticated and can be automated, resulting to more successful, widespread attacks against vulnerable websites
- **Cost and implications to victim companies?**



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WHY ARE THEY DOING IT

- Sheer volume of transactions done online today
- Payout from harvested credentials
- Can be automated and can be easily replicated

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COMBATING MAGENTO

How to protect your organization and prevent a similar attack in the future

CASE STUDY

- Client's website is hosted by a third-party in the EU
- Affected by an iframe replacement through XSS (SQLi)
- Occurred on an old module of the Magento platform (1.14.4.0) hosted on behalf of the client
- Affected Magento resource was **AjaxController.php**
- **500+ credit card form fills by EU citizens**

TIMEFRAME

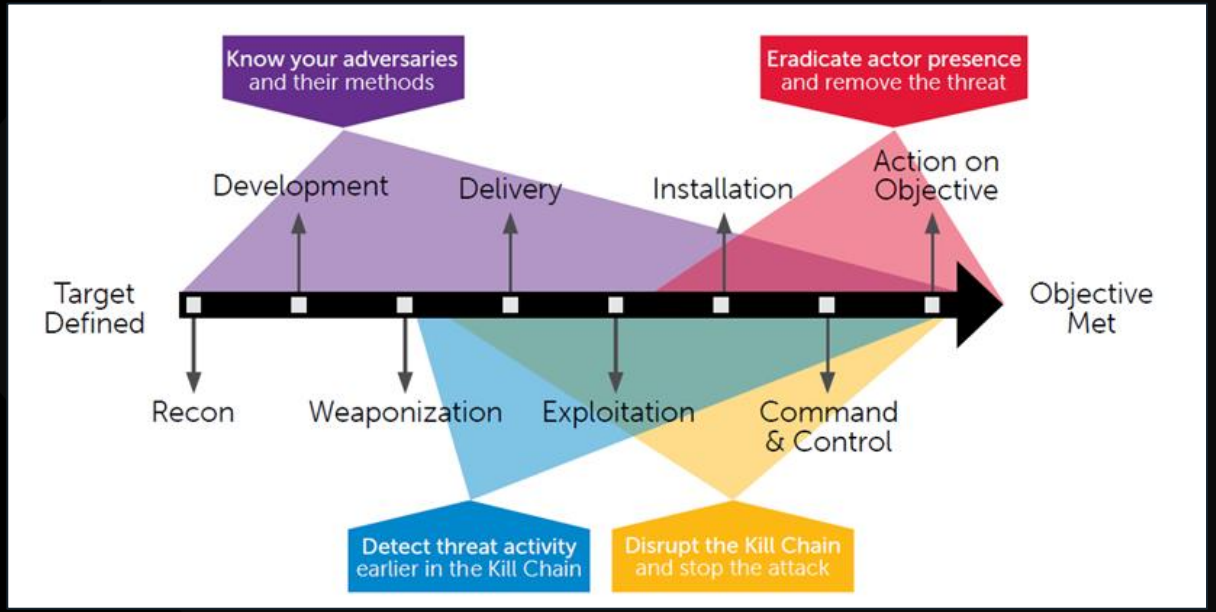
- **Patch +2 days - 17:04 - 17:08 UTC**: Time the threat actor injected malicious code; IP from Sweden.
- **Patch +2 days - 19:07 UTC:** Suspected time the threat actor had carried out attack.
- **Patch +2 days - 10:00 UTC:** Reported to the Client team.
- **Patch +2 days - 12:00 UTC:** Patch applied to webserver.

```
$sqlResults = $this->_connectionRead->fetchAll("SELECT city_name as placeName FROM " .
Mage::getSingleton('core/resource')->getTableName('localized_cities') . "
WHERE country = '" . $country . "' and city_zipcode = '" . $zipcode . "';");
```

THE CYBER KILLCHAIN

Phases

1. Reconnaissance
2. Development
3. Weaponization
4. Delivery
5. Exploitation
6. Installation
7. Command and Control
8. Action on Objective



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THWARTING DELIVERY

- Know your environment and current patch levels
- Have proper detection/prevention technologies in place
- Patch as soon as feasible
  - Utilize stopgaps until patch is implemented
- Check for lateral movement using a compromise assessment methodology or similar.

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EVOLVING TO PREVENTION

How to achieve perpetual prevention with the Cylance Prevention Platform

PATHWAY TO PREVENTION

Helping our clients move their environments into
a state of prevention from cyberattacks

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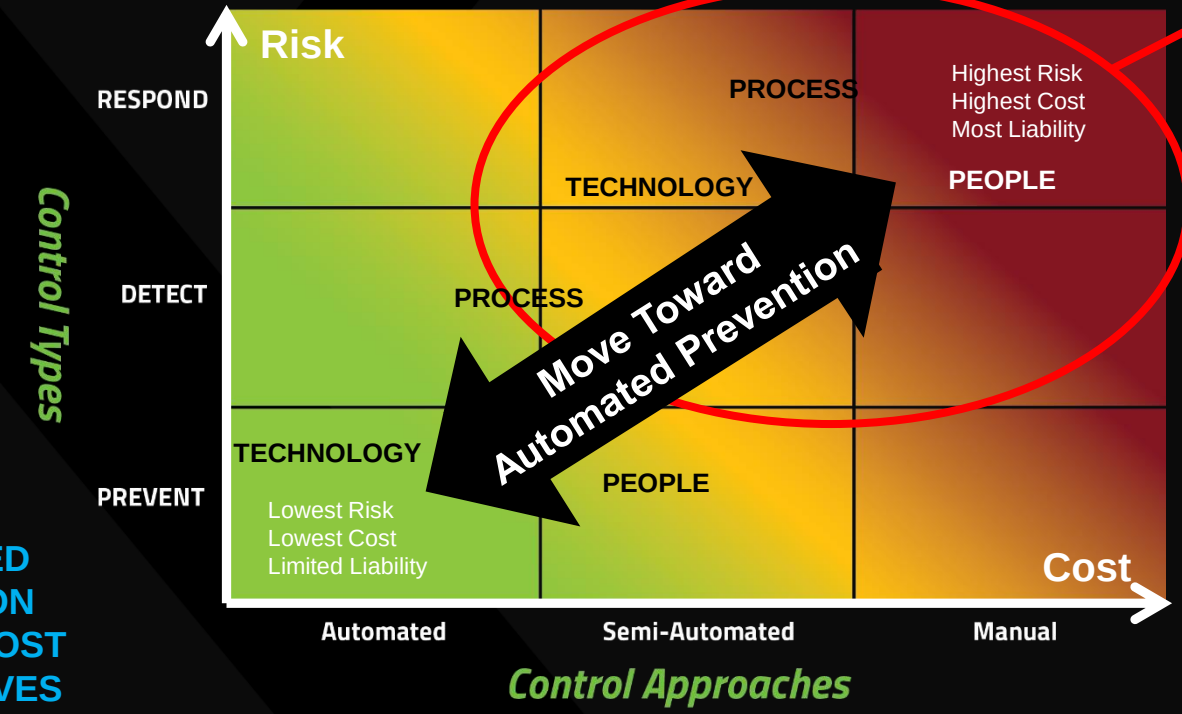
GETTING TO AUTOMATED & MANAGED PREVENTION



Where Most Of The Industry Is Focused

AUTOMATED PREVENTION Takes your COST down & PROVES the ROI

What manual response technologies can you now REMOVE?

9–BOX OF CONTROLS

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CYLANCE PREVENTION PLATFORM™

CylancePROTECT®

Enterprise Prevention
Home Edition / MSSP

CylancePROTECT ®
with Optics™

Consistent Visibility
and Preventative EDR

ThreatZERO™
MANAGED PREVENTION

Managed Prevention
and Response

INCIDENT
CONTAINMENT

Remediate
Compromise

AI-BASED CONSULTING

Red Team | ICS | IoT/Embedded Systems

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THE ASSESSMENT PARADOX

VULNERABILITY ASSESSMENTS

List of vulnerabilities

PEN TESTING

Anatomy of a hack

COMPROMISE ASSESSMENT

Are you hacked NOW?

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Deployment vs. Prevention

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Report Card

Grading Scale:

95 – 100% - A

94 – 85% - B

84 and Less - C

Files Analyzed	787,688,185
C	Overall Grade: 45.89%

Coverage Breakdown:

*Report generated as of 08/16/2016

Category	# Of Hosts/Files Under Category	Percentage Of Category	Description
Malware	5,374/7,098	75.71%	*The number of malware threats that have been quarantined.*
Potentially Unwanted Programs (PUPs)	22,067/34,259	64.41%	*The number of PUPs that have been quarantined/removed or whitelisted.*
Auto-Quarantine	543/13,452	4.04%	*The number of devices with Auto-Quarantine enabled for Unsafe and Abnormal threats.*
Memory Protection	0/13,452	0.00%	*The number of devices using Memory Protection in Block or Terminate mode.*
Script Control	0/13,452	0.00%	*The number of devices using Script Control in Block mode.*
Asset Inventory	11,644/13,452	86.56%	*The number of devices that have been online in the last 30 days.*
Upgrade Management	12,171/13,452	90.48%	*The number of devices on either of the two most recent versions of CylancePROTECT.*

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VALUE OF CYLANCEPROTECT

- AV ZERO – ROI Analysis
- PUPZERO
- Malware ZERO
- Memory Attacks ZERO
- Script Attacks ZERO

THREATZERO MANAGED PREVENTION

- Quarterly Prevention Assurance Reports
- Full malware status review
- Full PUP status review
- Updates of agent version
- Maintains your ThreatZERO status

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Report Card

Grading Scale:

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84 and Less - C

Files Analyzed	787,688,185
A	Overall Grade: 95.94%

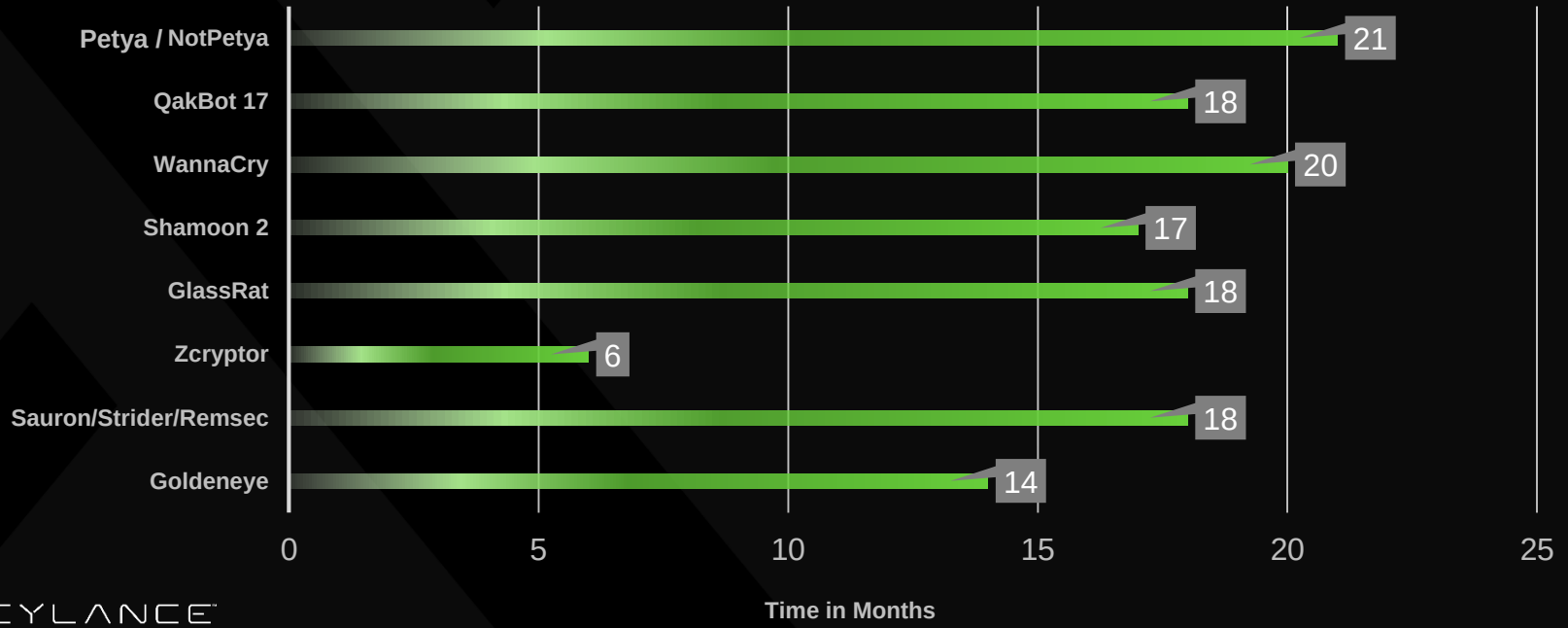
Coverage Breakdown:

*Report generated as of 08/16/2016

Category	# Of Hosts/Files Under Category	Percentage Of Category	Description
Malware	7,022/7,098	98.92%	*The number of malware threats that have been quarantined.*
Potentially Unwanted Programs (PUPs)	33,745/34,259	98.50%	*The number of PUPs that have been quarantined/removed or whitelisted.*
Auto-Quarantine	13,355/13,452	99.28%	*The number of devices with Auto-Quarantine enabled for Unsafe and Abnormal threats.*
Memory Protection	13,060/13,452	97.08%	*The number of devices using Memory Protection in Block or Terminate mode.*
Script Control	12,904/13,452	95.93%	*The number of devices using Script Control in Block mode.*
Asset Inventory	11,679/13,452	86.82%	*The number of devices that have been online in the last 30 days.*
Upgrade Management	12,783/13,452	95.03%	*The number of devices on either of the two most recent versions of CylancePROTECT.*

PREVENTION IS POSSIBLE

CylancePROTECT® has been able to detect and block new threats before they were first seen “in the wild” – without any updates or special configuration.



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DELIVERING PREVENTION-BASED SOLUTIONS

- Integrated Practice Areas
- Dedicated Engagement Manager
- Holistic Approach
- Customized Solutions
- World-Renowned Security Authorities
- Global Coverage with Local Attention

IoT / EMBEDDED SYSTEMS

INCIDENT CONTAINMENT & FORENSICS

INDUSTRIAL CONTROL SYSTEMS

RED TEAM SERVICES

ThreatZERO™

STRATEGIC SERVICES

EDUCATION

CYLANCE™

LET US PROVE IT TO YOU

IT'S ABOUT THE OUTCOME – PERPETUAL PREVENTION