

BLUEHEXAGON
Cyber AI You Can Trust



Accelerate your Threat Hunting + IR with Next-Gen NDR + EDR

Speakers:

Balaji Prasad, Blue Hexagon

Heike Ritter, Microsoft

Arun Raman, Blue Hexagon

July 17th, 3 pm ET



UPSTART100



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COMPANY

Founders and team members
with expertise in Deep Learning,
Threat Research, Security, High
Performance Compute

- Qualcomm machine learning expertise (500+ patents)
- FireEye, Symantec, Palo Alto Networks, Juniper security expertise
- PHDs - MIT, Georgia Tech, Purdue, Princeton

CUSTOMERS

- Healthcare
- Insurance
- Financial Services
- Retail



PARTNER INTEGRATIONS

Member of
Microsoft Intelligent
Security Association

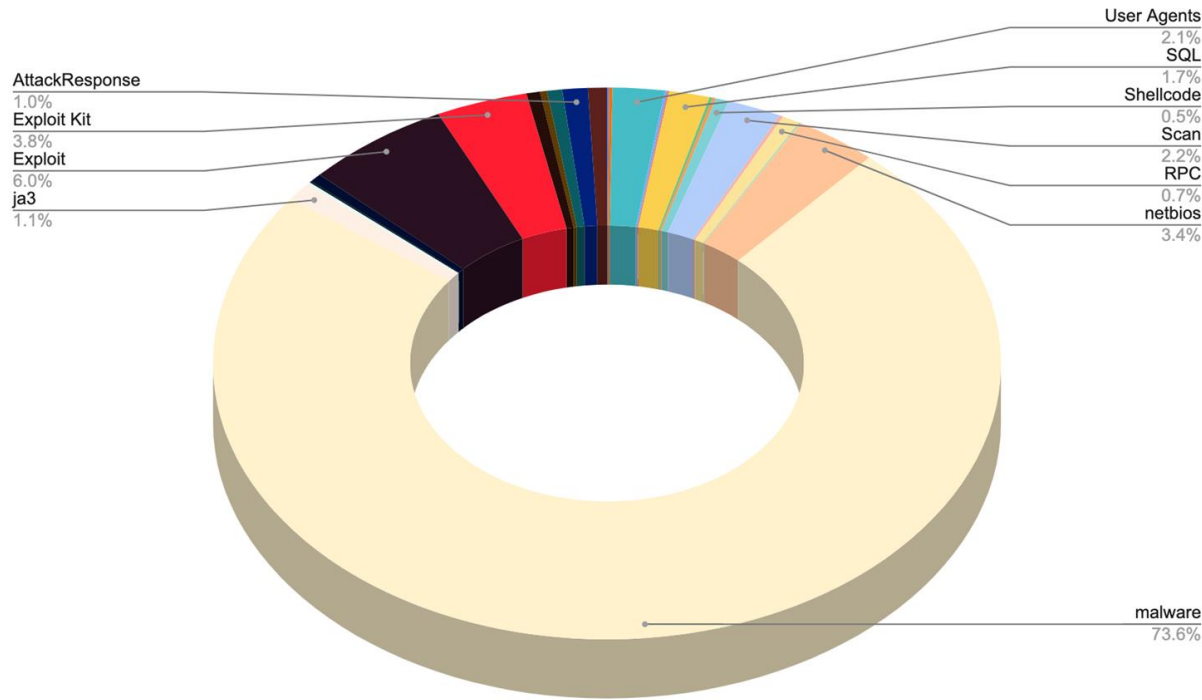


Breaking News: Blue Hexagon recognized by leading industry analysts

- [2020 Gartner Market Guide for Network Detection and Response](#)
- [2020 Forbes AI 50: America's Most Promising Artificial Intelligence Companies](#)
- [Forbes Report: Gartner's Top 25 Enterprise Software Startups To Watch In 2020](#)

Network Threats : Malware, Exploits and C&C → Higher Variety

Dynamic Evolving Threats vs Static Threats



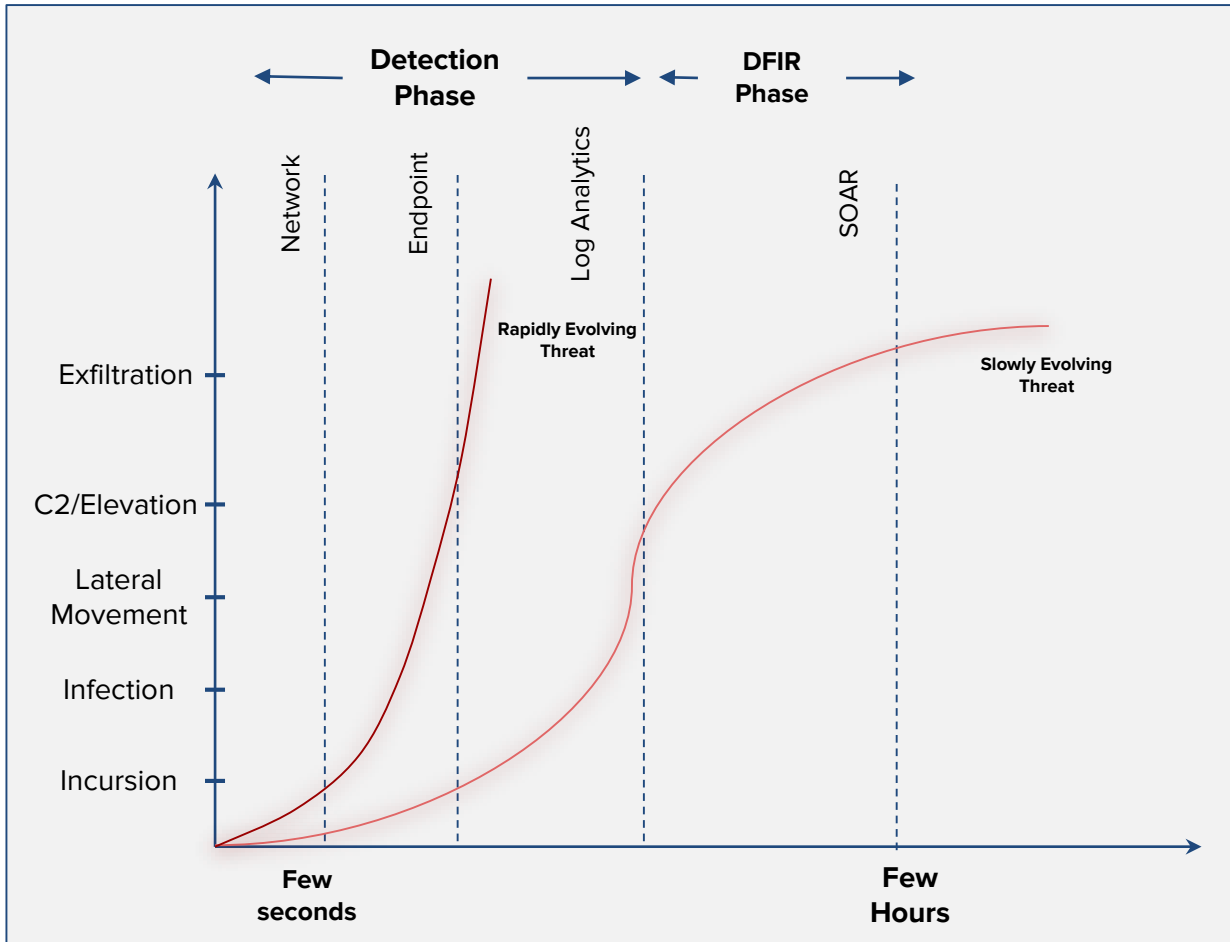
Malware, Exploits and C&C

- Hard to keep up with fast evolving content and techniques
- Rules do not scale
- Needs fundamental innovation
- Real Time Deep Learning scales

Protocol attacks, DOS, Network Scans

- Evolve slowly and are very specific
- Behavior based or static rule based detection
- Reducing the sigs and rules helps improve performance

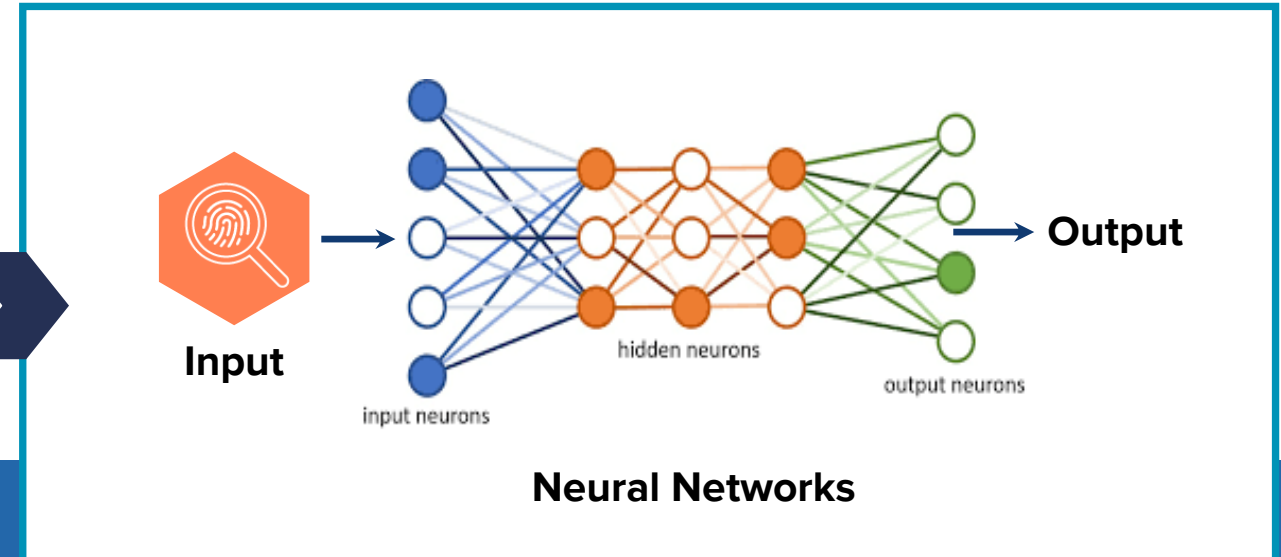
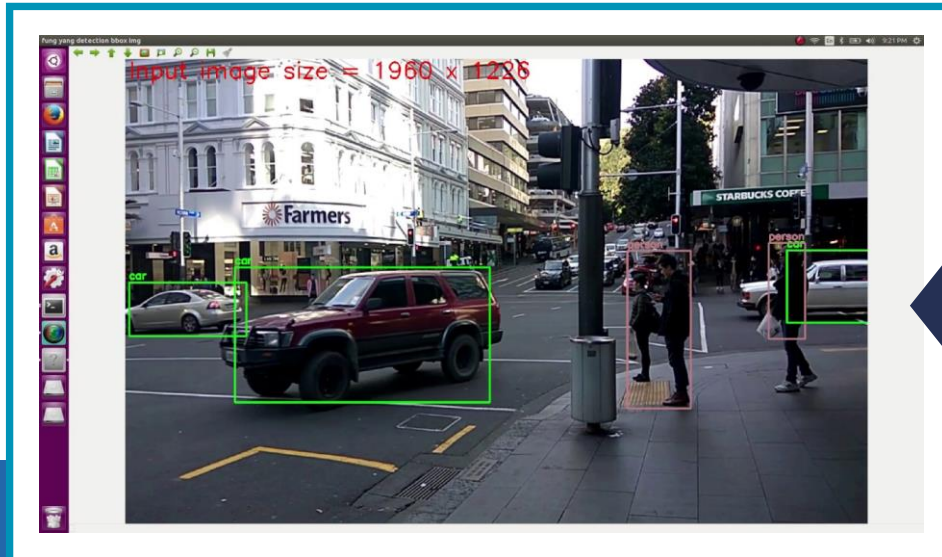
Can more technology improve DFIR?



- SOC Triad - NDR, EDR & SIEM
- Different timescales & data lakes
⇒ RCA & correlation hard
- More suited for slowly evolving threats that registers activity on various security controls
- Rapidly evolving threat will circumvent the control triad.
- **Solution: Stop threats at point of incursion using tightly correlated NDR & EDR**

A new Approach

Harnessing Deep Learning for Real-Time Detection

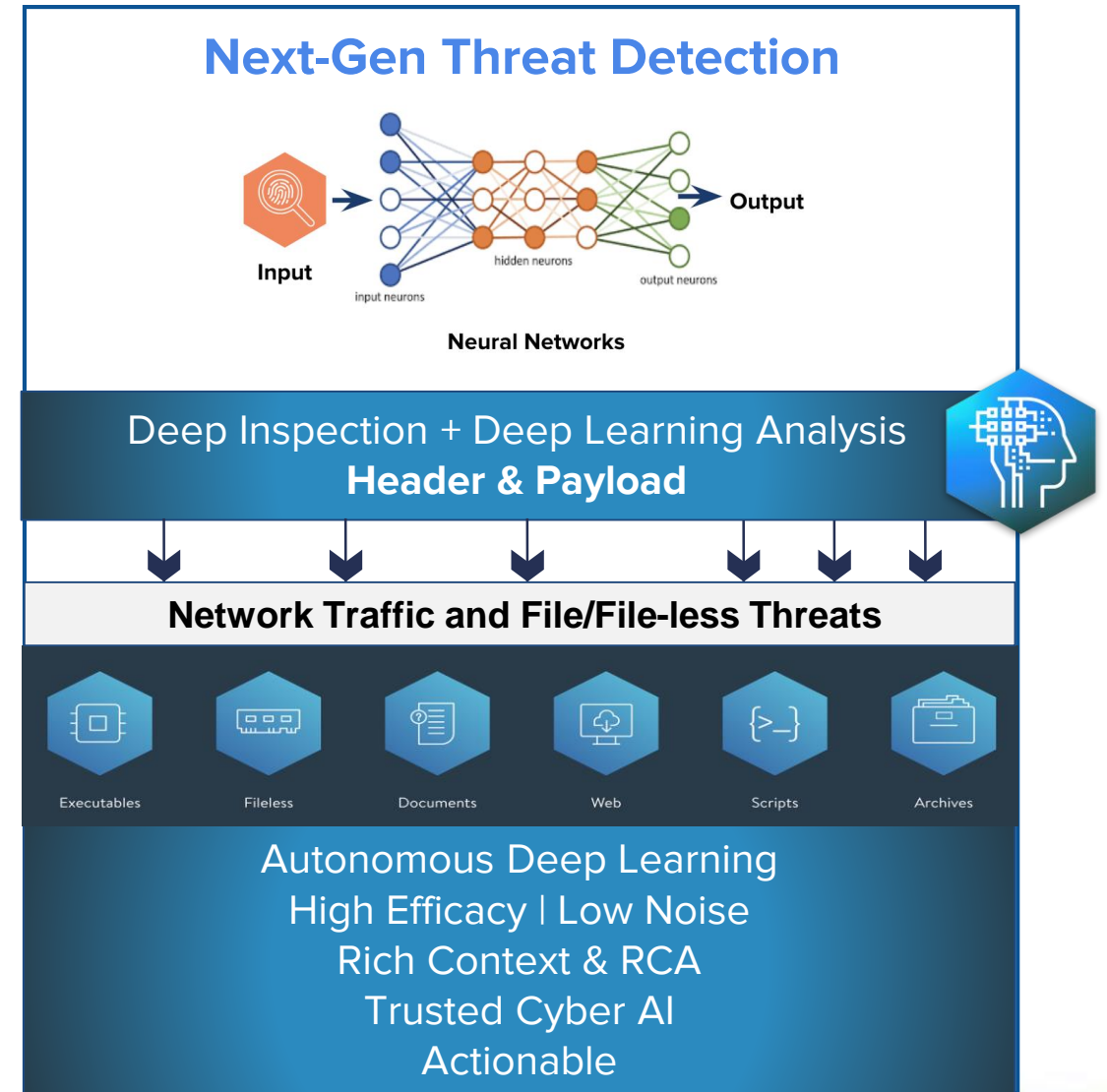


Similar to deep learning bounding box around photos, apply deep learning to network traffic

- ✓ Massive threat data exists
- ✓ GPUs now available for processing
- ✓ Enhancements in deep learning models

Evolving to Next-Gen AI - Real Time Deep Learning

- Deep Learning for Malware, Exploits and C&C detection
 - Train using labeled samples
 - Classify unseen sample based on learned characteristics
 - High generalization capacity → deals with daily new variants
 - Low FP → blocking possible
- Behavior Analytics for Exfiltration, Recon and Post-Infection detection
- Rules only needed for small set of static attacks → better scaling with Gbps



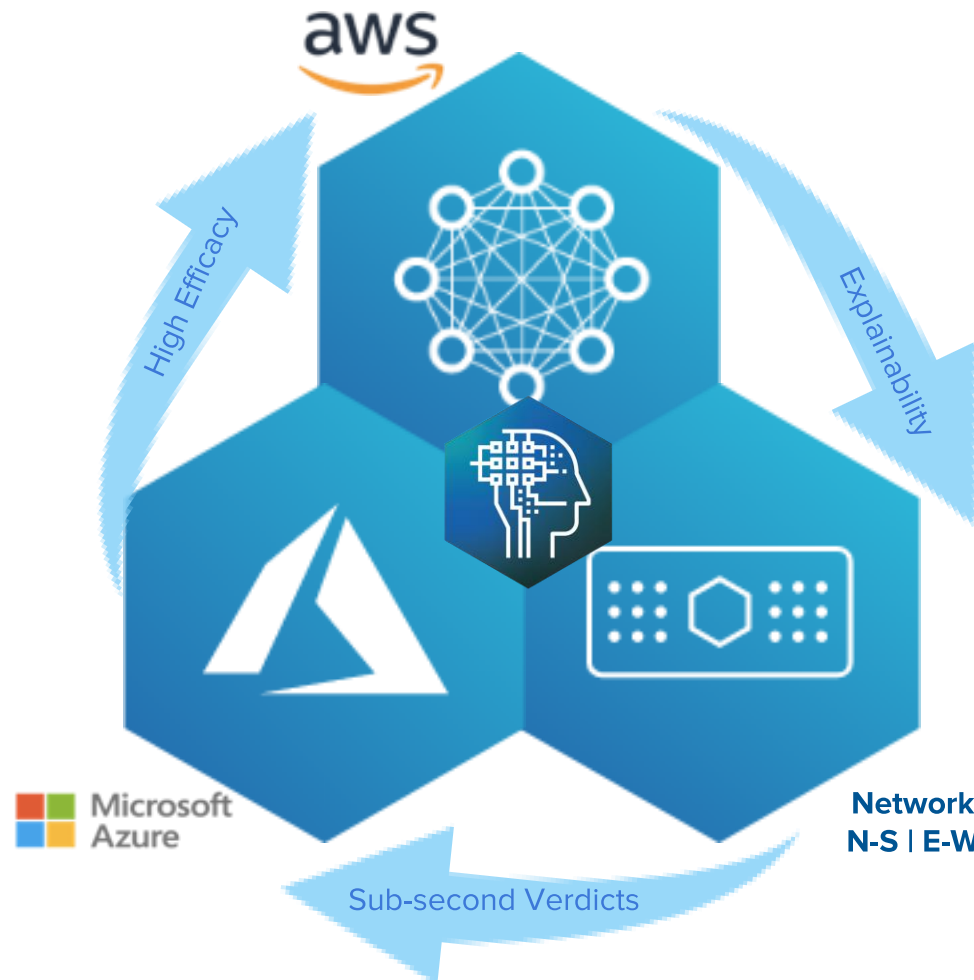
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Cyber AI You Can Trust

Real Time Deep Learning

- ~**100%** efficacy and **sub-second** detection
- Detect and Prevent known & **0-day malware and threats**
- Predictive **AI Explainability** for advanced detection and hunting

Get Full Visibility



Easy to Deploy & Manage

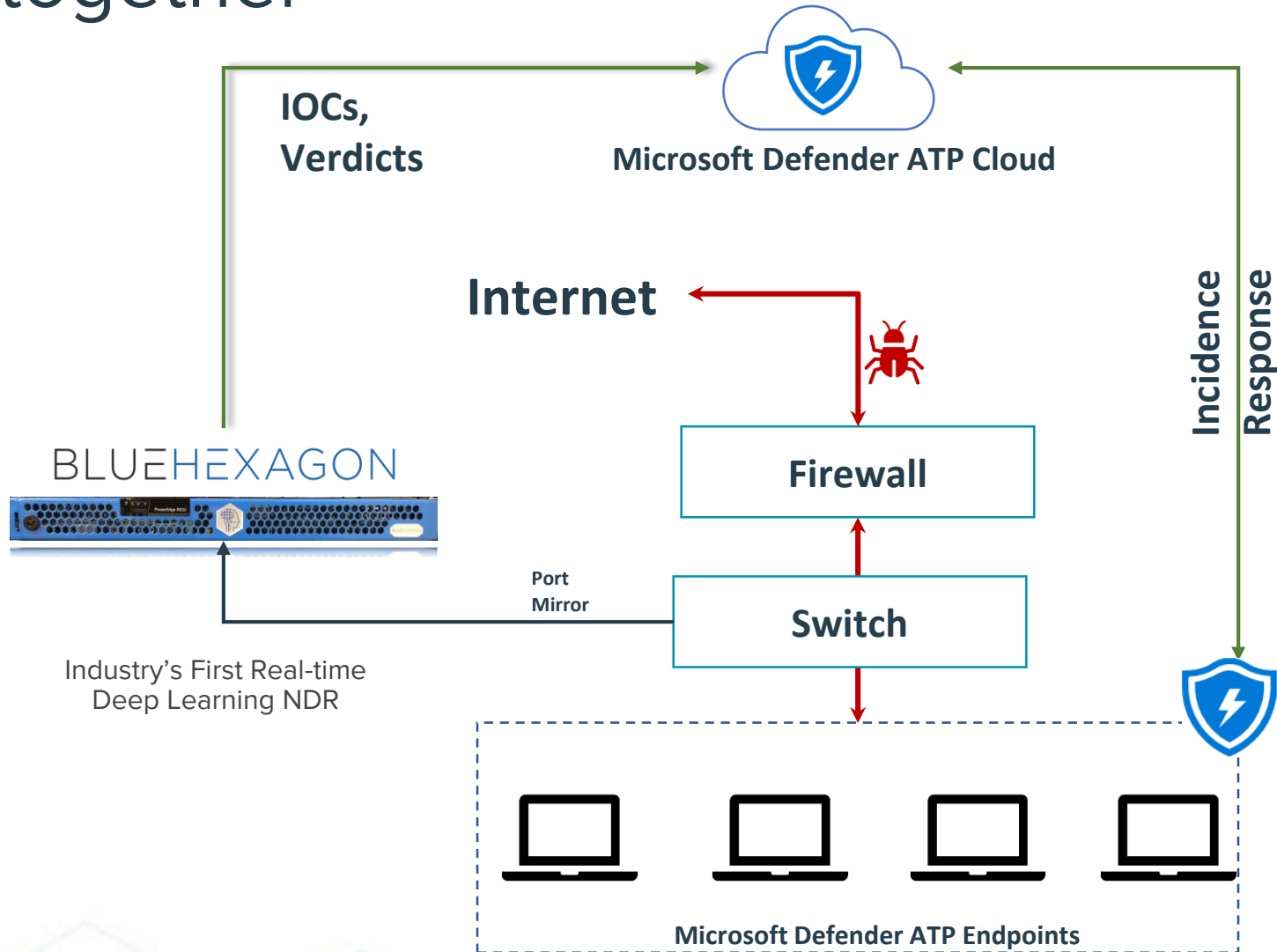
- **Autonomous Analysis** - no baselining or learning delays
- **No rules, signatures or sandbox** required
- **Cloud-managed** on-prem and cloud deployment

Cloud Native or Hybrid

**Next-Generation
Network Detection and Response**

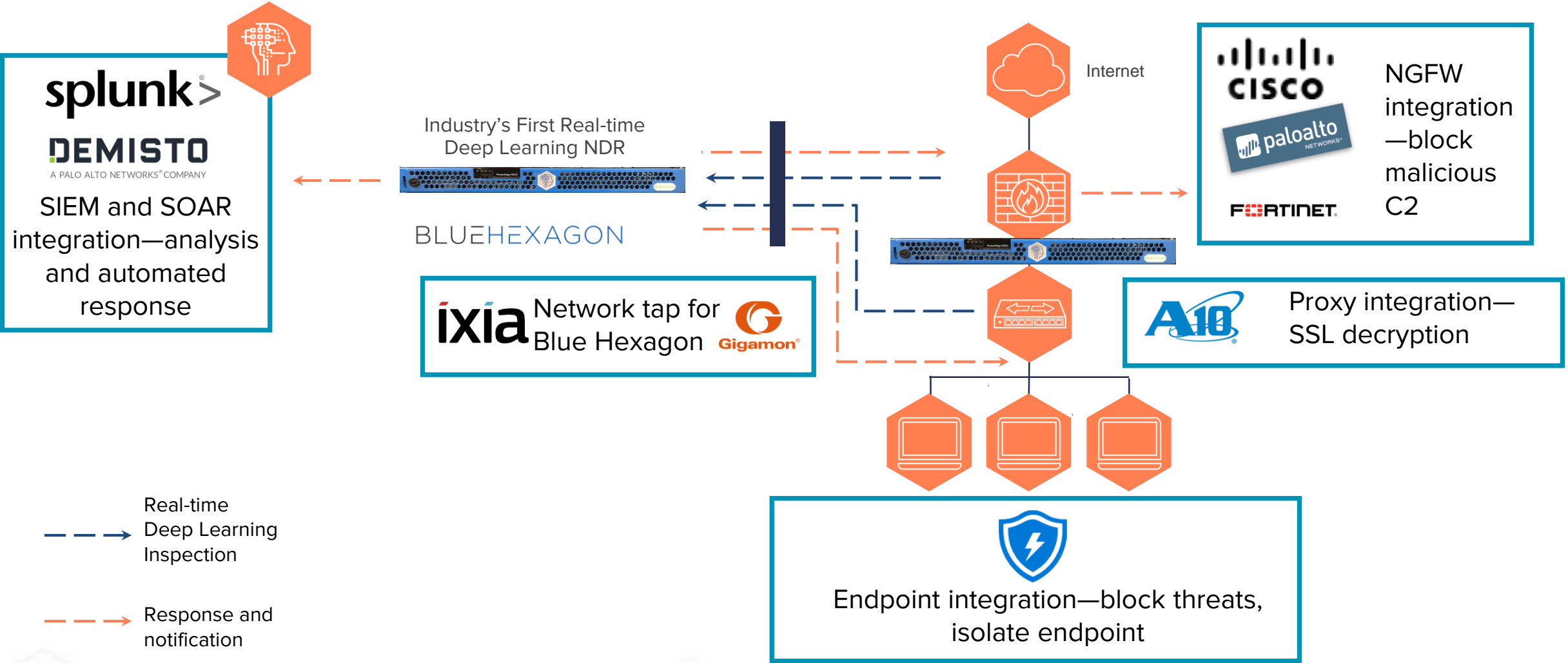
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Blue Hexagon and Microsoft Defender ATP - Better together



- Currently, the **ONLY** network security partner to integrate with Microsoft Defender ATP
- BH detects threats early in the network and notifies Microsoft Defender ATP for incident response
- File blacklisting, endpoint quarantine & Forensics Collection supported
- One click integration using Microsoft Graph API

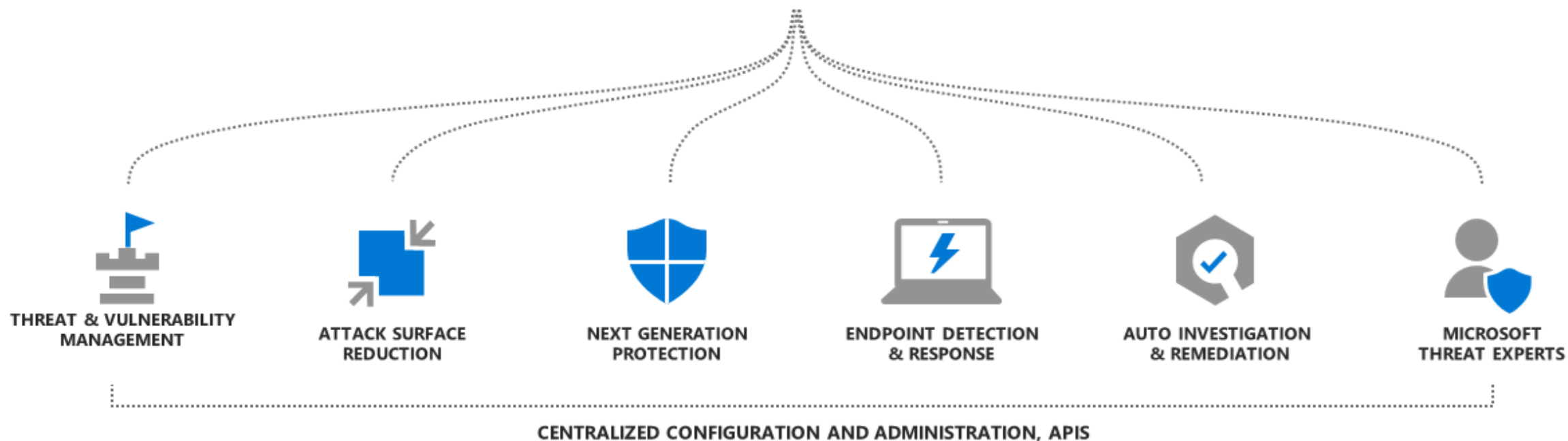
Enterprise Ecosystem





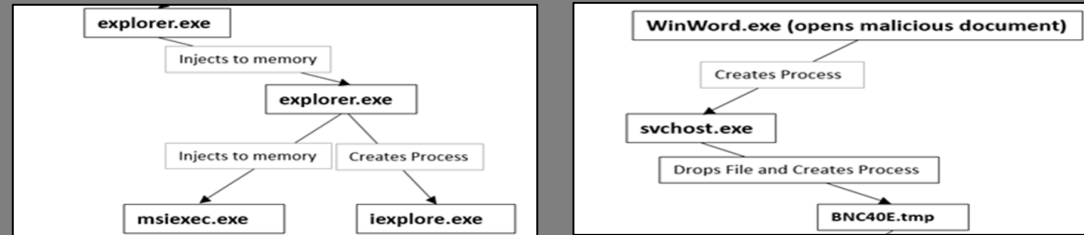
Microsoft Defender Advanced Threat Protection

Built-in. Cloud-powered.



EDR “Process Trees” Detection Layers at a Glance

Input
Process Trees



Layer 1
“Expert” Models

Network
Classifier

Registry
Classifier

Memory
Classifier

PowerShell
Classifier

LsHash
Classifier

PE attributes
Classifier

Command Line
Classifier

AMSI VB
Classifier

AMSI JS
Classifier

PowerShell Deep Learning
Classifier(s)

...

Layer 2
Ensemble Decision Models

Decision Models
(Word, Excel, PowerShell,...)



Alert

Triage & Investigation

Understand what was alerted

Alert investigation experience provides detailed description, rich context, full process execution tree

Investigate device activity

Full machine timeline to drill into activities, filter and search

Rich supporting data & tools

Supporting profiles for files, IPs, URLs including org & world prevalence, deep analysis sandbox

Expand scope of breach

In-context pivoting to other affected machines/users

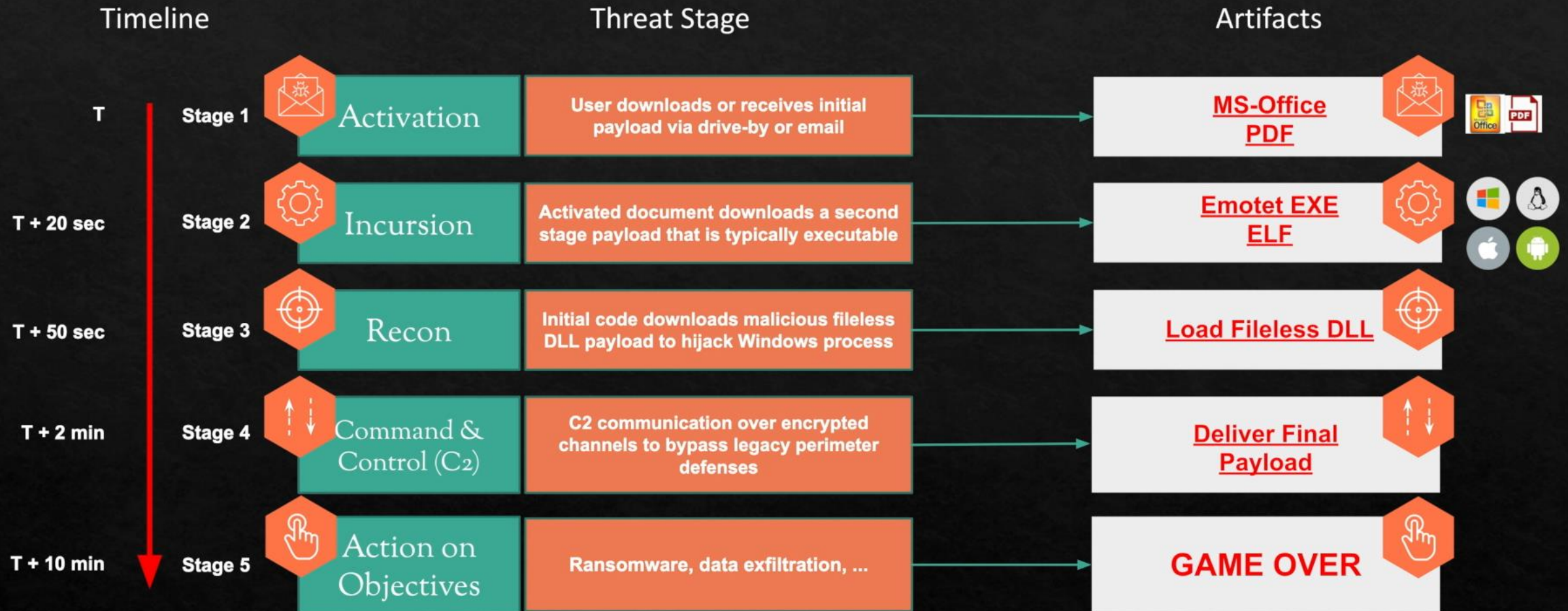
The image displays a collage of screenshots from the Microsoft Defender for Endpoint (MDE) console, illustrating various investigation tools and data points:

- Alert Details (COM hijacking):** Shows an alert for "COM hijacking" on machine "apt29-client3". It includes details like severity (Medium), category (Persistence), and detection source (EDR). A description explains that a Common Object Model (COM) reference has been modified in the registry.
- Alert Process Tree:** A hierarchical diagram showing the execution flow starting from "sdclt.exe", leading to "control.exe", "powershell.exe", and "reg.exe".
- Machine Profile (apt29-client3):** Provides details about the machine, including its risk level (High), exposure level (No data available), domain (apt29.org), OS (Windows 10 x64), and health status (Inactive).
- Timeline View:** A chronological view of events on the machine, highlighting the "COM hijacking" alert and subsequent registry modifications by "reg.exe".
- File Details (reg.exe):** Shows the execution details of the "reg.exe" process, including its path (C:\Windows\System32), integrity level (High), and command line ("reg.exe" import C:\Users\jly.jarvis\AppData\Local\Temp\skreg).
- Event Info (control.exe created process powershell.exe):** Details the event where "control.exe" created "powershell.exe", including the event time (Aug 15, 2019, 5:39:38.755 PM) and action type (ProcessCreated).

NDR and EDR DEMO

Dr. Arun Raman

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THANK YOU

Take it for a Test-Drive!

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Signup for a online demo and trial to get a 60-day free subscription <https://bluehexagon.ai/ngndr-free-trial/>



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