

Machine Learning:

- A cybersecurity FRIEND to beat the bad guys -

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AGENDA

- **Introduction**
 - Speaker
 - Palo Alto Networks
 - AI or Machine Learning?
- **The challenges of today's world**
- **Machine Learning in Cyber Security
(Palo Alto Networks' approach)**

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INTRODUCTION (SPEAKER)

INTRODUCTION (PALO ALTO NETWORKS)

85

of Fortune 100
rely on Palo Alto Networks



63% of the Global 2K
are Palo Alto Networks customers

**European
presence**

**Europe, Middle East and Africa
(EMEA) headquarters in
Amsterdam, since 2013.**



48,000+

customers
in 150+ countries



Automated protection delivered in as little as 5 minutes



**Nearly 70 Palo Alto Networks
Academy Program partners and
education institutions in more than
18 EU Member States**



ARTIFICIAL INTELLIGENCE ?



MACHINE LEARNING ?

Artificial Intelligence: *software that becomes aware of its own existence and can make thoughtful decisions.*

Rick Howard, CSO Palo Alto Networks

Machine Learning: *a software-development technique used to teach a computer to do a task without explicitly telling the computer how to do it.*

Sam Debrule, co-founder of the *Voice of Machine Learning* journal

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INSTRUMENTED & INTERCONNECTED WORLD



An aerial photograph of a dense railway yard with numerous tracks curving and intersecting. A train is visible in the upper right corner. The text "COMPLEX ORGANIZATIONS" is overlaid in the center in white, bold, sans-serif font.

COMPLEX ORGANIZATIONS

DEMANDING CITIZENS



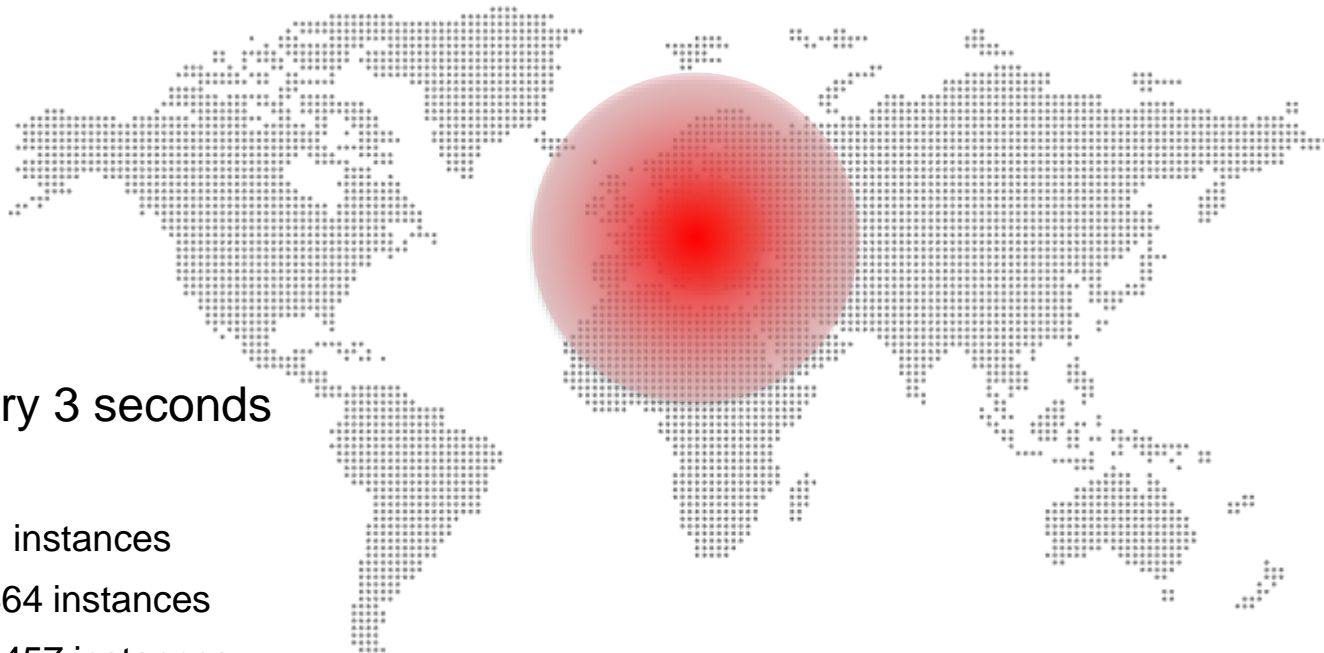
A wooden gavel with a gold band is positioned diagonally across the frame, resting on a wooden block. In the background, a stack of books is visible, with the top book having a dark cover and gold lettering. The scene is set on a dark wooden surface.

COMPLIANCE & REGULATIONS

DIVERSE, EVOLVING AND SOPHISTICATED THREAT



SOPHISTICATED MALWARE SPREADING



New infection every 3 seconds
After....

1 minute = 2,021 instances

15 minutes = 9,864 instances

30 minutes = 45,457 instances

HIGHLY AUTOMATED ADVERSARIES



CHANGE CYBER SECURITY



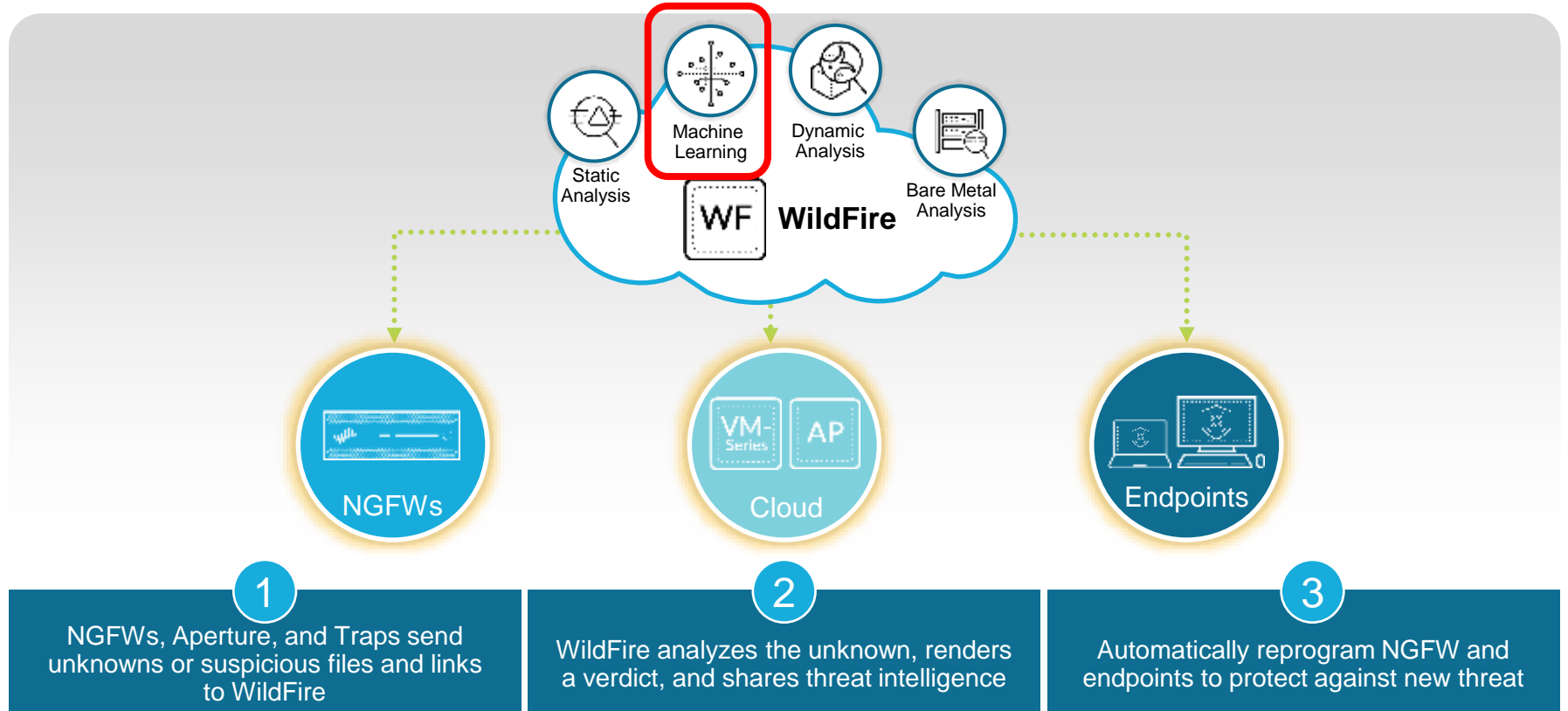
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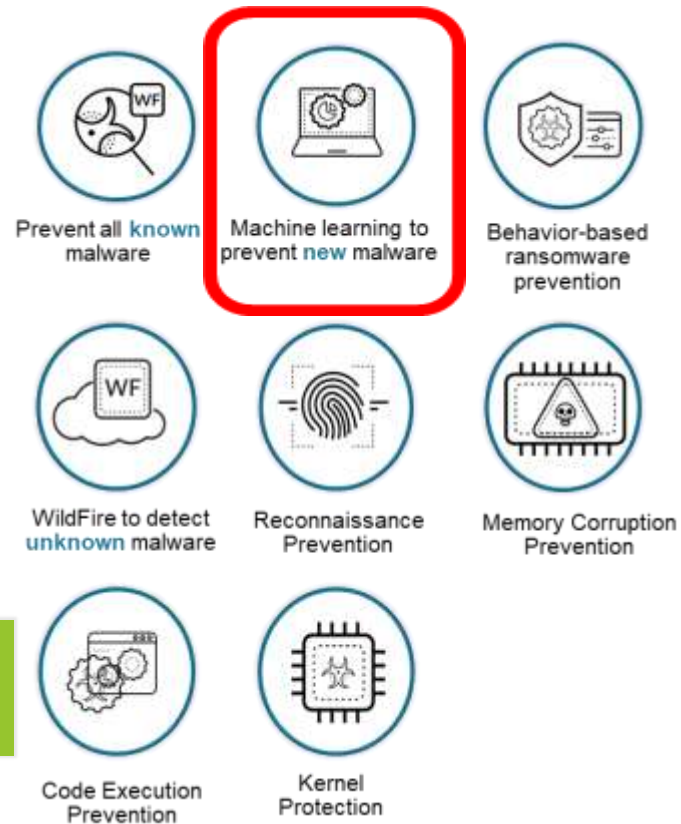
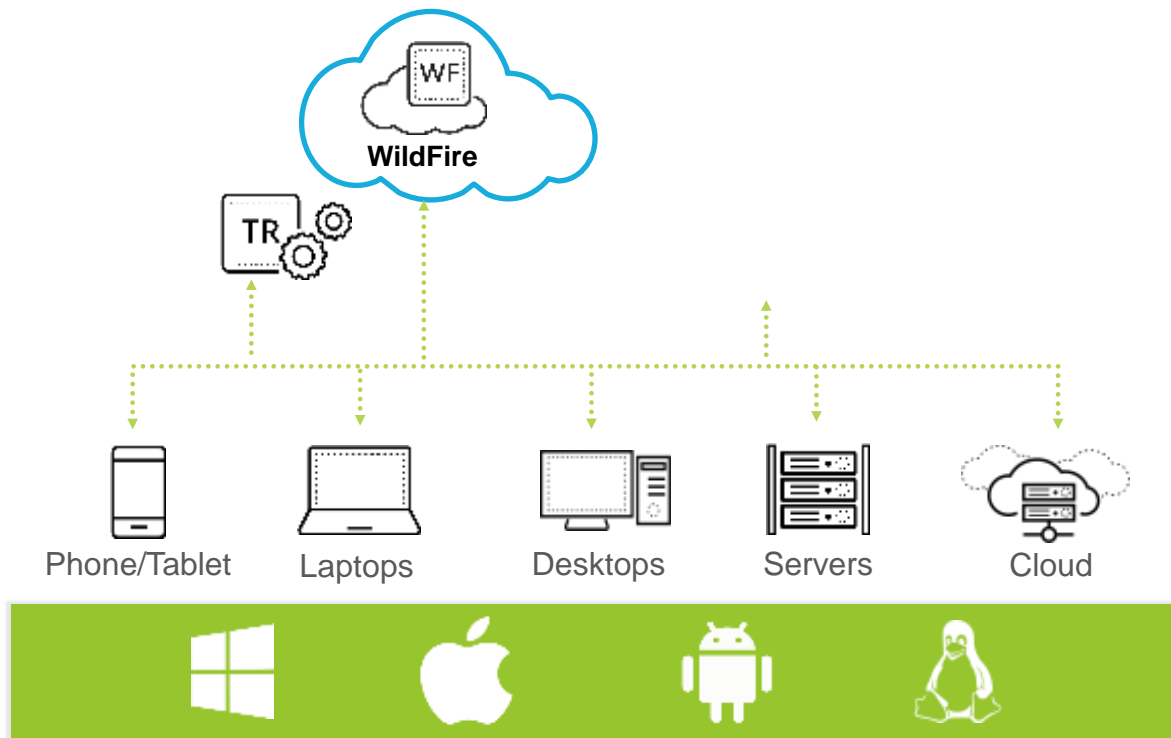
SECURITY OPERATING PLATFORM



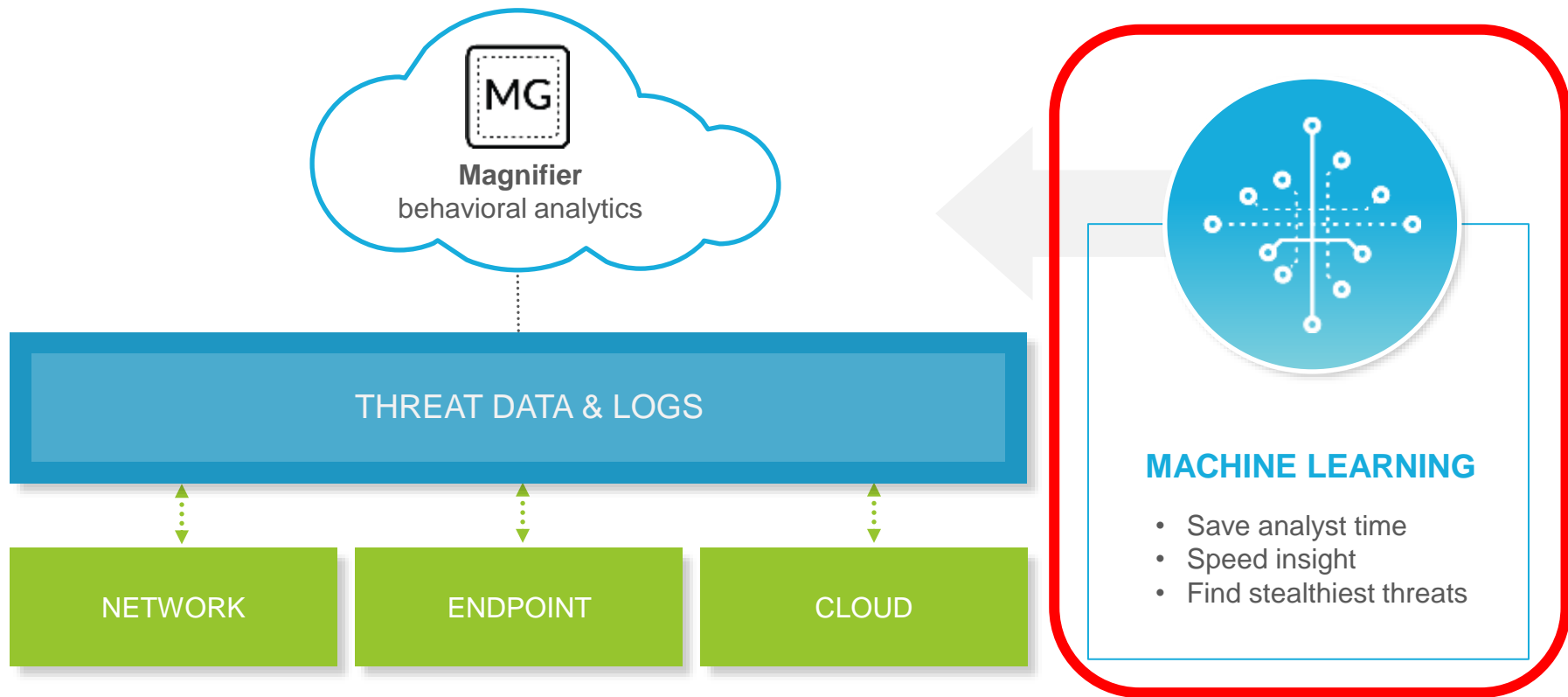
WILDFIRE



TRAPS



MAGNIFIER





MACHINE LEARNING CYBER SECURITY BEST FRIEND

TSLA
AVGO
SIRI



Thank you for the attention!



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