

IAITAM ACE 2025

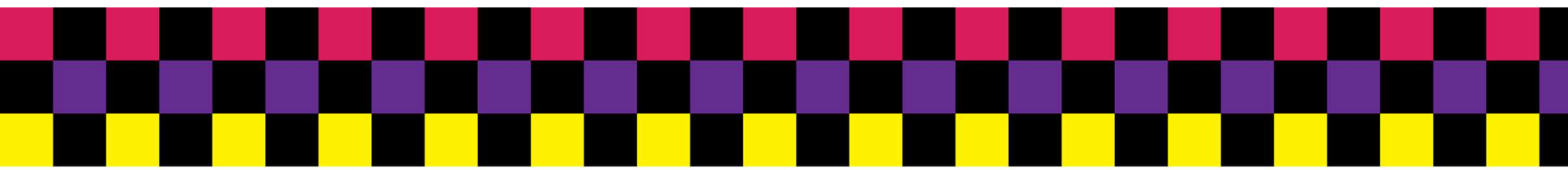
ITAM - Another Brick In The Wall

**Solving modern & complex
business problems with HCL
Software BigFix**

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Jan-Christian Björkly-Nordström





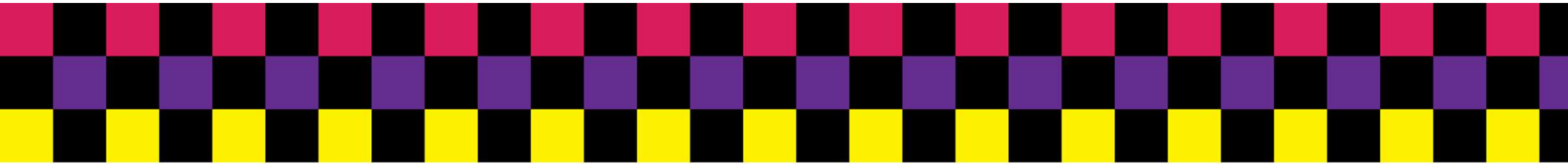
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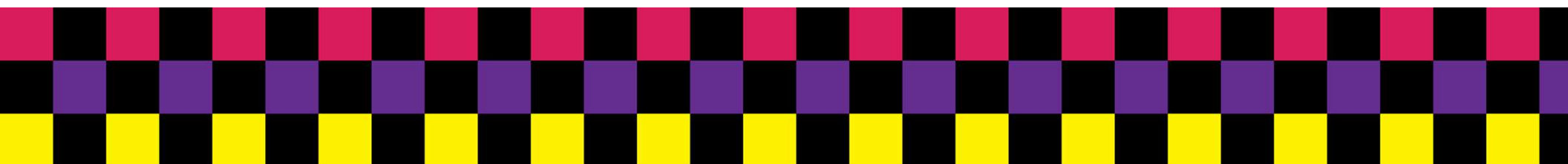
Agenda

1. Managing embedded software
2. Systematically identifying and eradicating unwanted software
3. Mastering software licensing control in secure, classified networks
4. Summary
5. Questions



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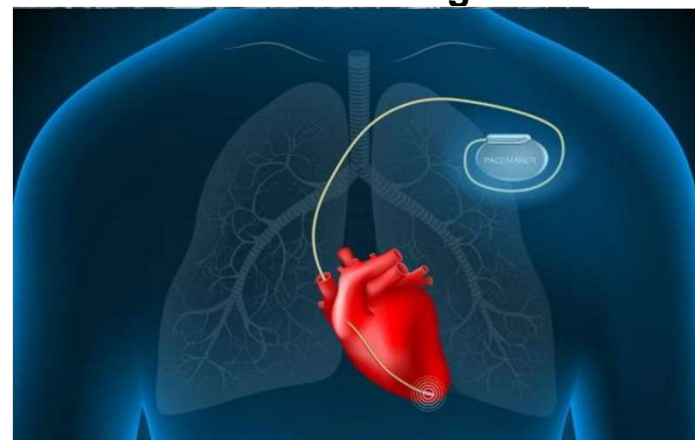


1. Managing embedded software – What are embedded systems and Internet of things devices?

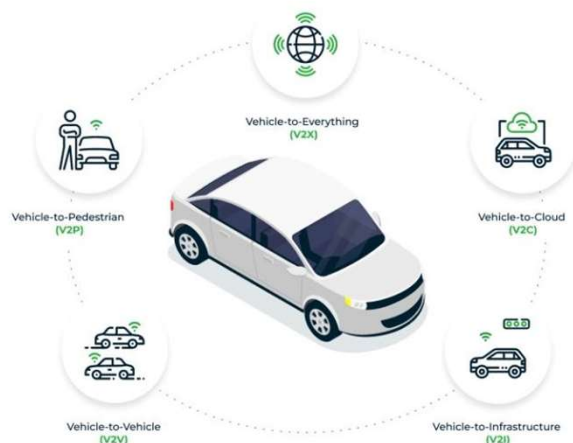
Embedded systems are specialized computer systems designed to perform specific tasks within larger devices.

Examples:

1. **Home Appliances:** Washing machines, microwaves.
2. **Automotive Systems:** Airbag control, engine management systems.
3. **Industrial Equipment:** PLCs (programmable logic controllers), robotics.
4. **Medical Devices:** Pacemakers, infusion pumps



Connected Cars Interchange of Data



Internet of Things (IoT) devices are physical objects embedded with sensors, software, and connectivity, enabling them to collect, share, and act on data over the internet.

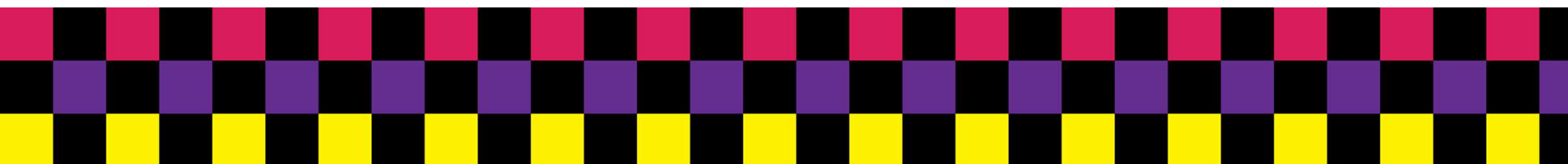
Examples:

1. **Smart Home Devices:** Smart thermostats, smart bulbs.
2. **Wearables:** Fitness trackers, smartwatches.
3. **Industrial IoT:** Smart factories, predictive maintenance systems
4. **Connected Cars:** Real-time navigation, vehicle diagnostics



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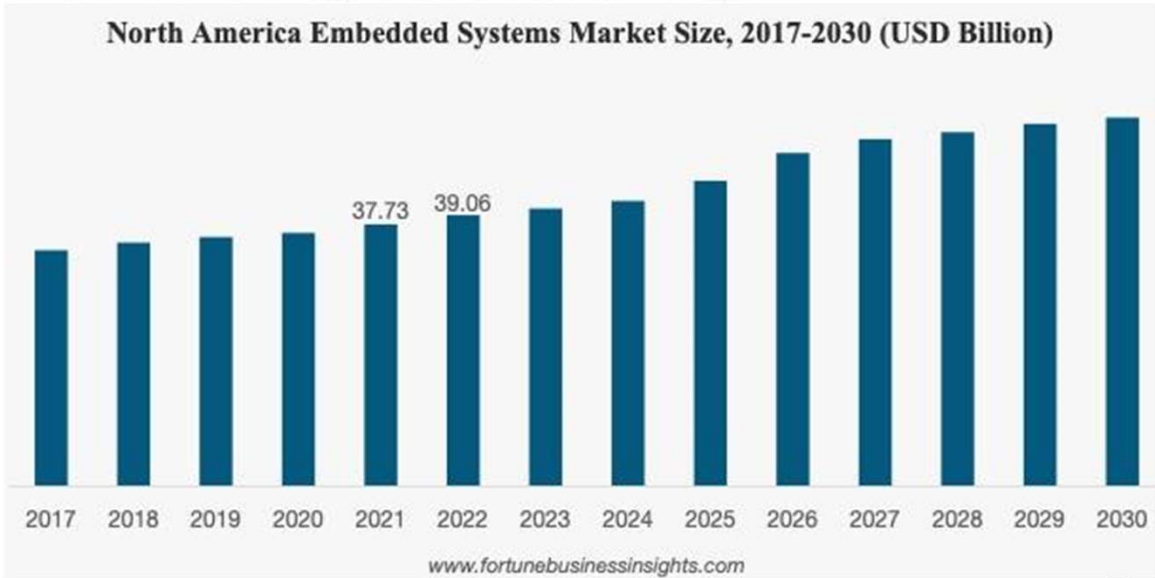
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1.2 Managing embedded software – the business problem, understood but why should we care?

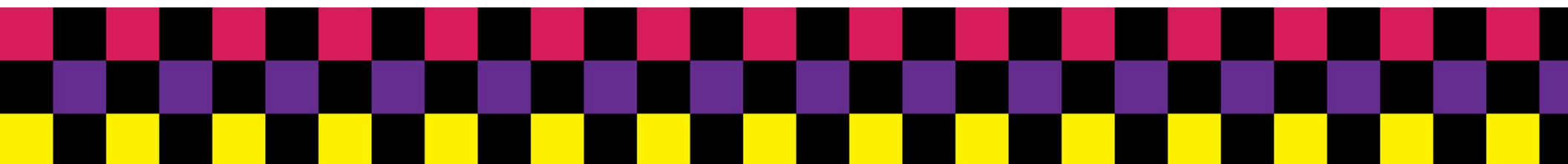
The global embedded systems market was valued at USD 110 billion in 2024 and is estimated to grow at 6.4% CAGR from 2025 to 2034. The rise in the automobile sector is one of the key factors across the globe that fuels the market.

ARTIFICIAL
ADVISORY
INTELLIGENCE



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1.3 Managing embedded software – the business problem

Problem Definition

- What is the problem?
- Why is it a problem?
- Who is this a problem for?
- Cost/Risk of not solving it?



Embedded Systems / IoT visibility and tracking throughout the lifecycle

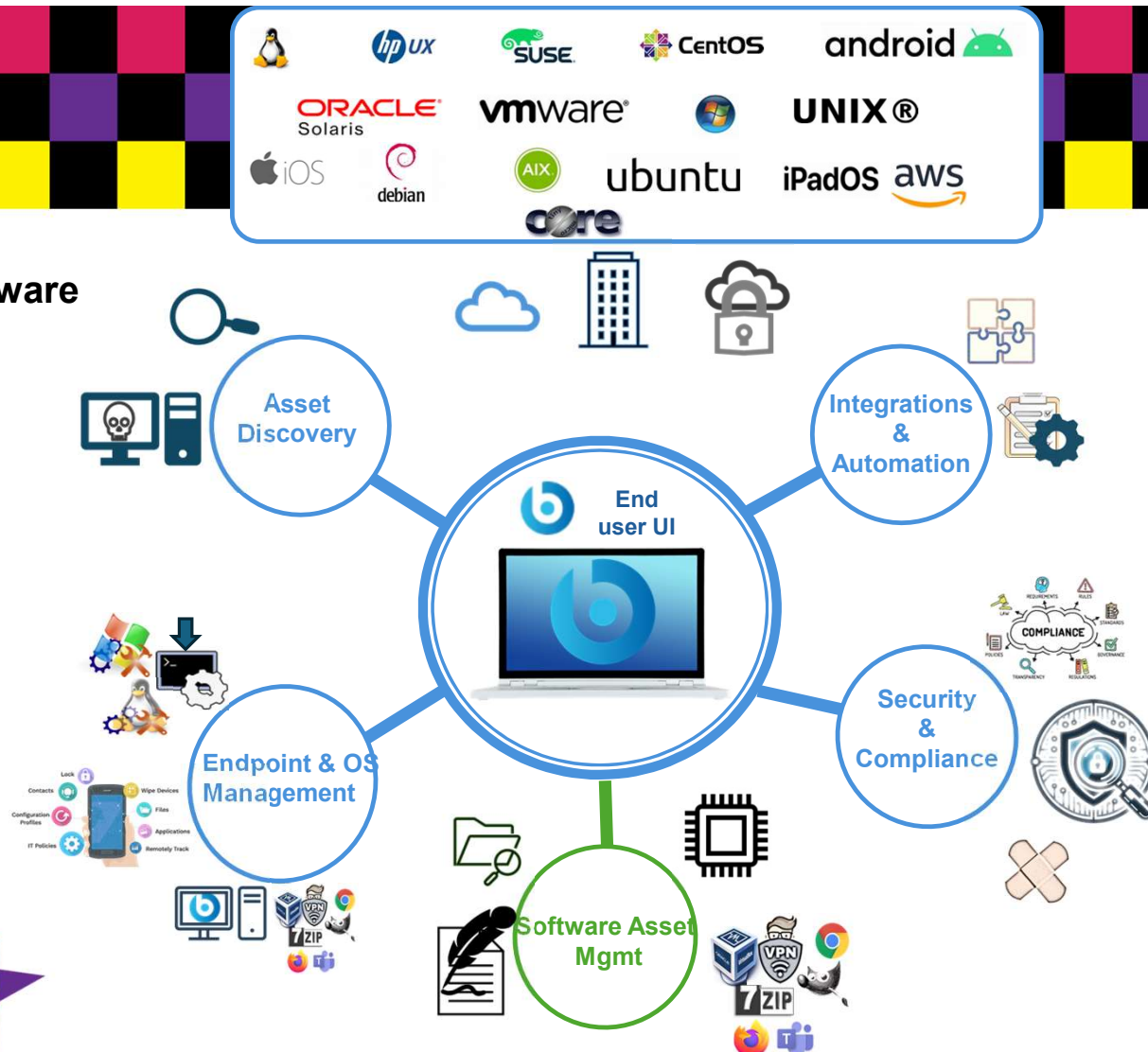
- Accurate tracking of embedded software across the product lifecycle is needed, but current tools like Excel cause fragmented data, limited access, poor analysis, hindering development & efficiency
- The project team building the embedded system are not likely to remain, meaning that issues, opportunities and efficiencies are dependant on access to high calibre people, not process
- Existing embedded project teams, new project teams, product owners, cost estimators, purchasing teams and strategists
- No added efficiencies over time and projects. Cost of repeated manual and therefore error prone actions. Risk to the service of existing customers, meaning risk to future revenue.



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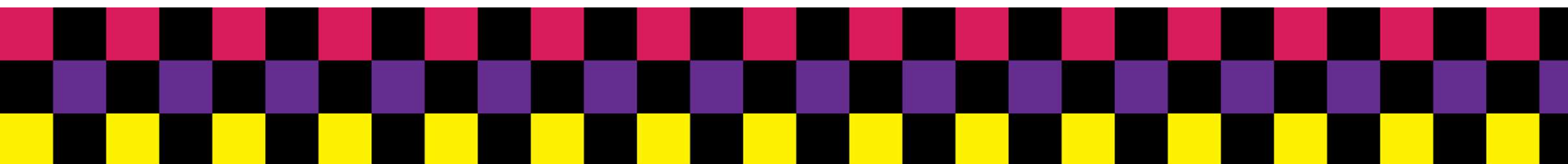


1.4 Managing embedded software – the business problem

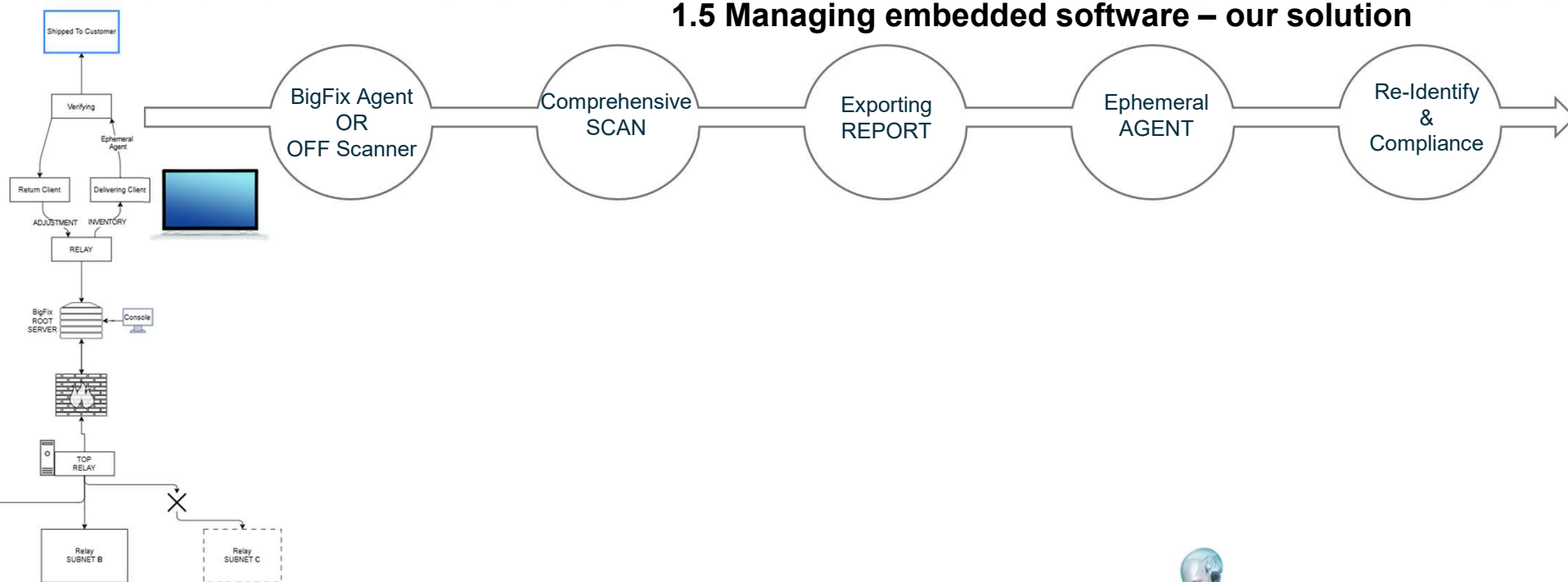


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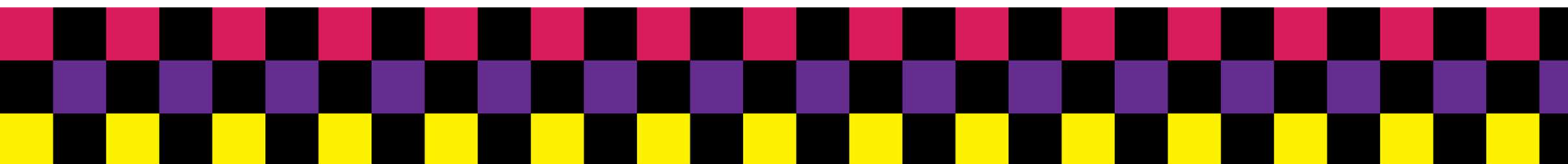
1.5 Managing embedded software – our solution



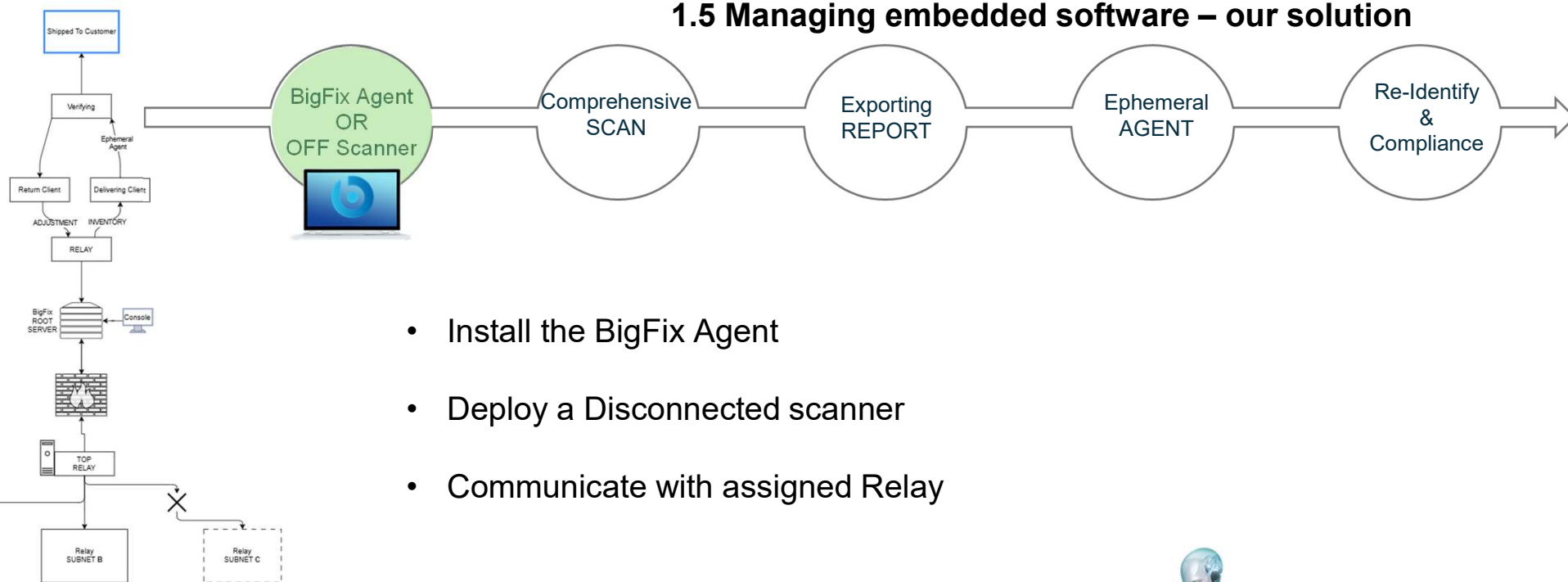
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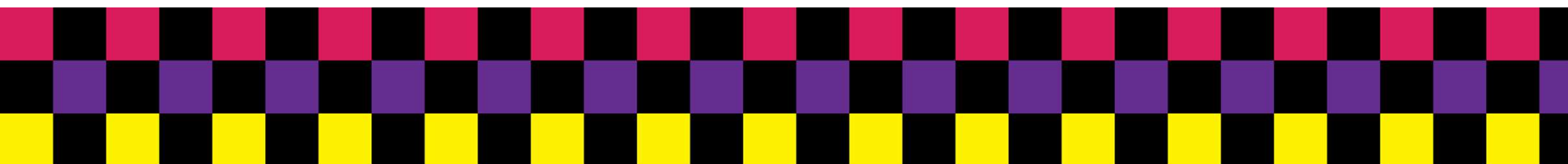
1.5 Managing embedded software – our solution



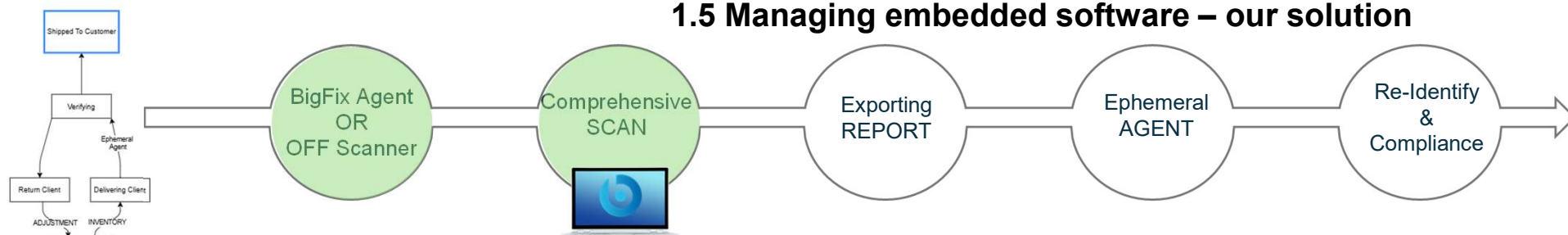
- Install the BigFix Agent
- Deploy a Disconnected scanner
- Communicate with assigned Relay

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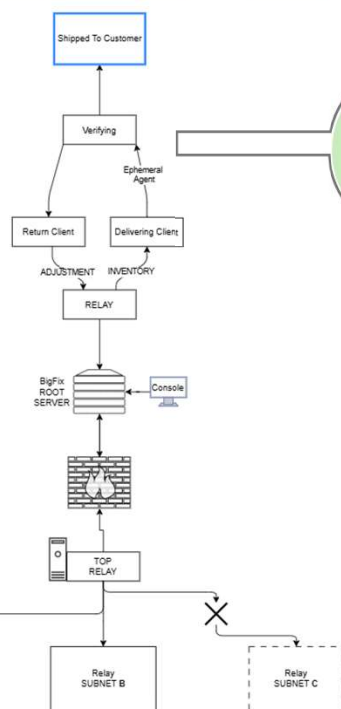




1.5 Managing embedded software – our solution



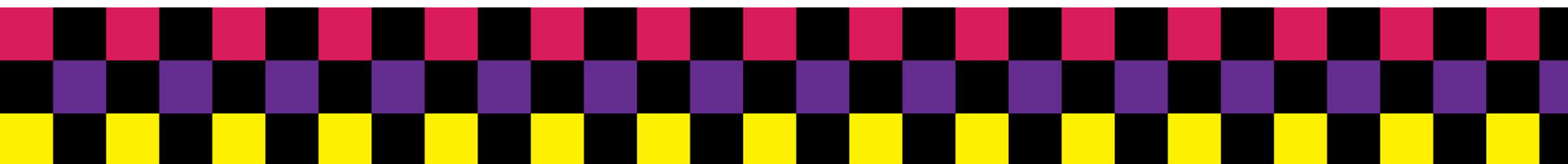
- Hardware Inventory
- Software Inventory
- Identify blacklisted software for removal
- whitelisted software to verify compliance



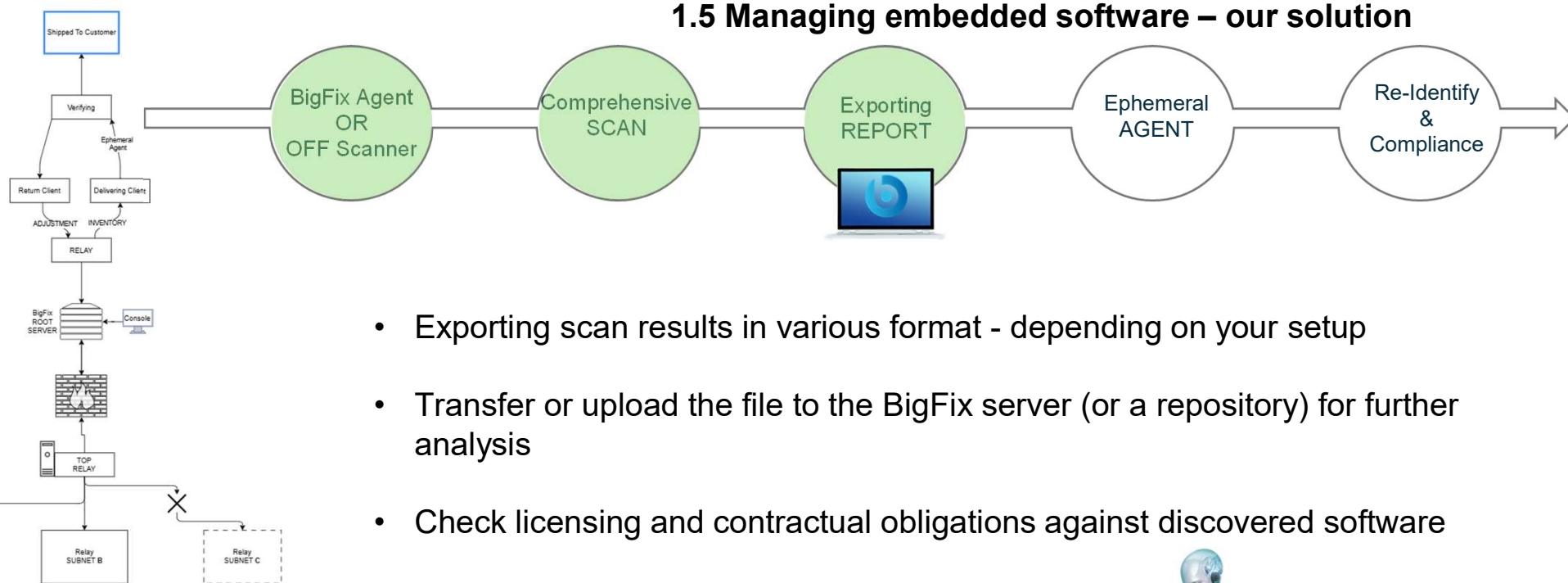
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1.5 Managing embedded software – our solution



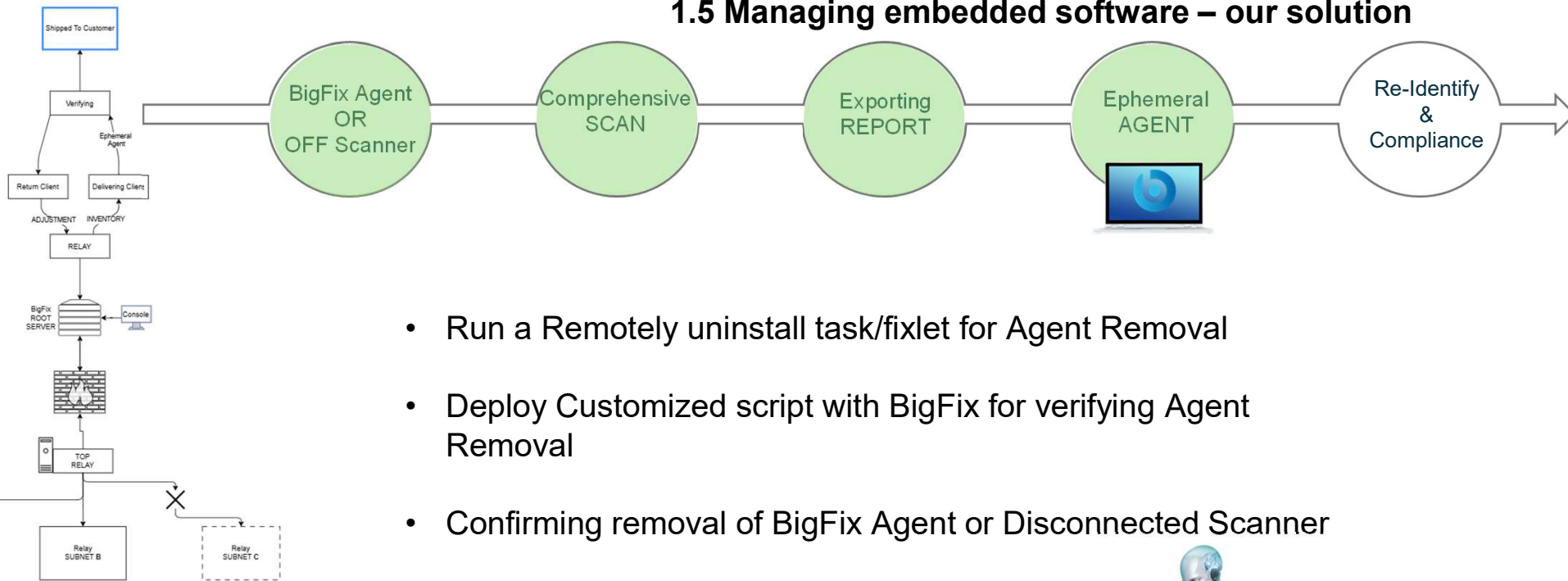
- Exporting scan results in various format - depending on your setup
- Transfer or upload the file to the BigFix server (or a repository) for further analysis
- Check licensing and contractual obligations against discovered software



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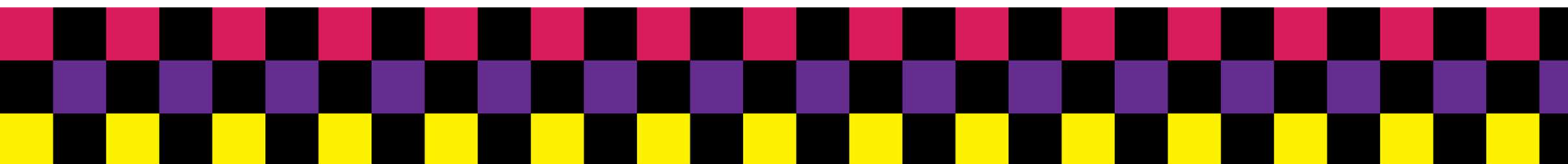
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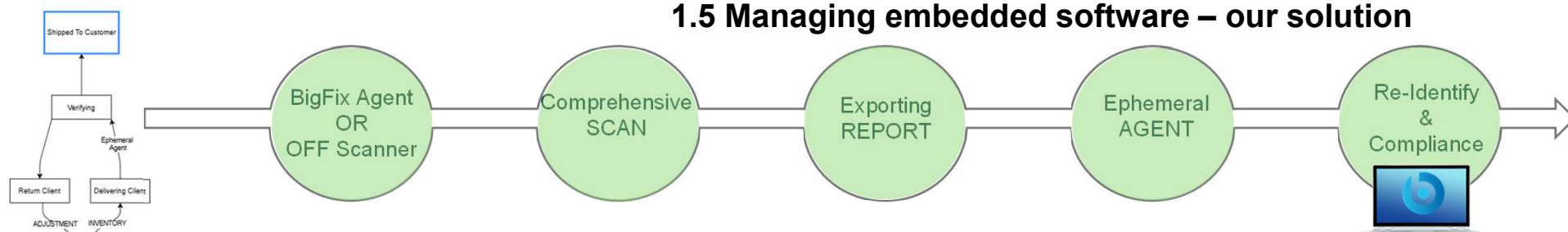
- Run a Remotely uninstall task/fixlet for Agent Removal
- Deploy Customized script with BigFix for verifying Agent Removal
- Confirming removal of BigFix Agent or Disconnected Scanner



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1.5 Managing embedded software – our solution



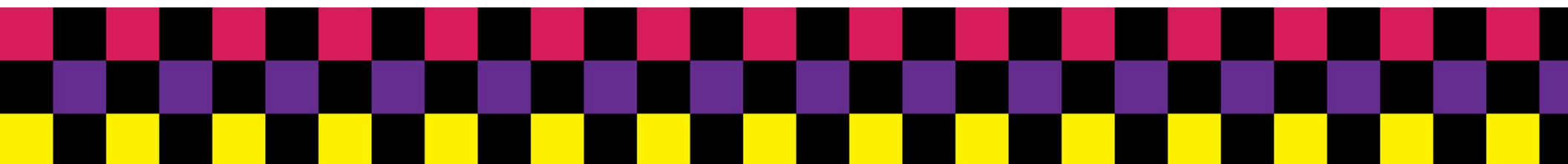
- Assigning unique identifier to correlate scans on the same device, even if the BigFix Agent ID Changes
- Compare new scan results (If the machine returns) against the old report to see if software or hardware changed
- Update whitelists/blacklists and remediate any compliance gaps



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2.0 Systematically identifying and eradicating unwanted software – the business problem

- New licensing terms
- Changes in Strategy
- Cost Cutting Enforced
- Vendor/Reseller/Dist
- M&A and Divestitures
- Misc Reasons



Why do we have unwanted software?

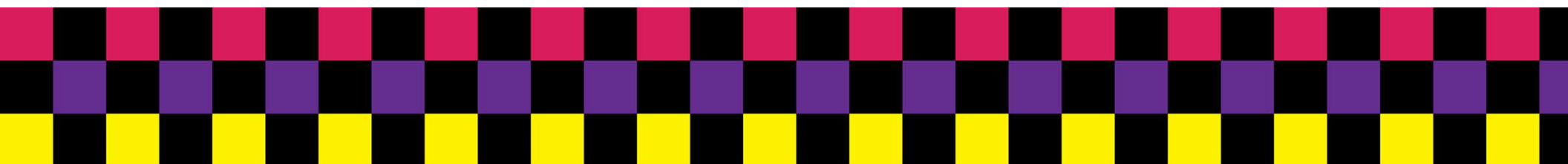


- Installation Errors
- 'Feudal Lord Syndrome'
- 'Not my responsibility'
- M&A and Divestitures
- Poor Processes / Discipline
- Misc Reasons



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2.1 Systematically identifying and eradicating unwanted software – understood but why should we care?

Perspectives

Cost savings and brand protection from software asset management

How to avoid the software sinkhole

To say companies are overspending on software would be an understatement. According to Gartner, software licensing and maintenance activities comprise close to 22 percent of the IT budget for many companies. The latest numbers indicate the software industry will generate \$380 billion in 2018. At the same time, many enterprises lack a clear view of their software assets—they don't know how many licenses they own, and they don't know how or where they've deployed the software they've paid for.



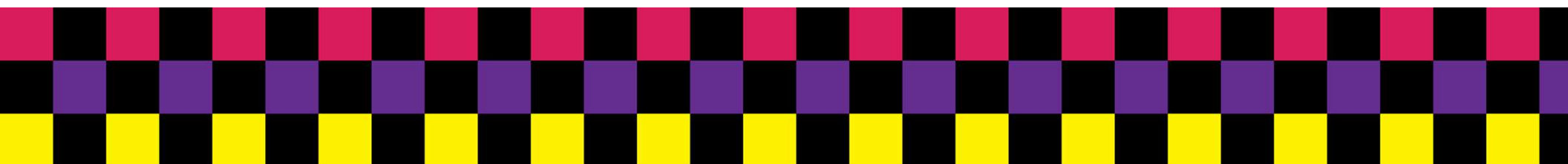
In software asset assessments recently performed by Deloitte, companies had unrealized cost savings totaling 25 percent of their annual maintenance spend. Put another way, effectively managing software can save serious cash. So what can your organization do to use software asset management (SAM) to help your bottom line and protect your brand?

ELON MUSK'S Department of Government Efficiency announced this week that it discovered large batches of unused software licenses as it continues to hunt for examples of waste in Washington. On Monday, DOGE alleged that the General Services Administration has 37,000 licenses for the file compression and encryption tool WinZip, even though the agency has only about 13,000 employees. "Fixes are actively in work," the team wrote on Musk's social media site X. It later alleged similar overspending at the Department of Labor.



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2.2 Systematically identifying and eradicating unwanted software – the business problem

Problem Definition

- What is the problem?
- Why is it a problem?
- Who is this a problem for?
- Cost/Risk of not solving it?



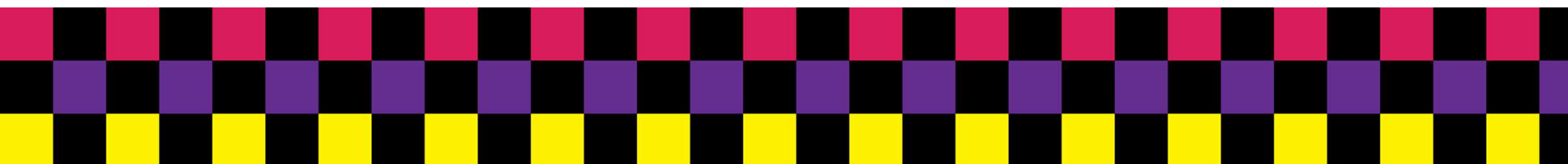
Systematically identifying and eradicating unwanted software

- Accurately identify, remove and ensure unwanted software and they remain removed
- Once identified as unwanted (for whatever reason) it must be removed, as not doing so, will incur costs, increase risk and potentially impacts the business bottom line and/or reputation
- All roles concerned with risks, costs, operations and the reputation of the entity exposed
- Enormous:** One of the reasons why SAM, HAM, FinOps and SAM tools etc exist!

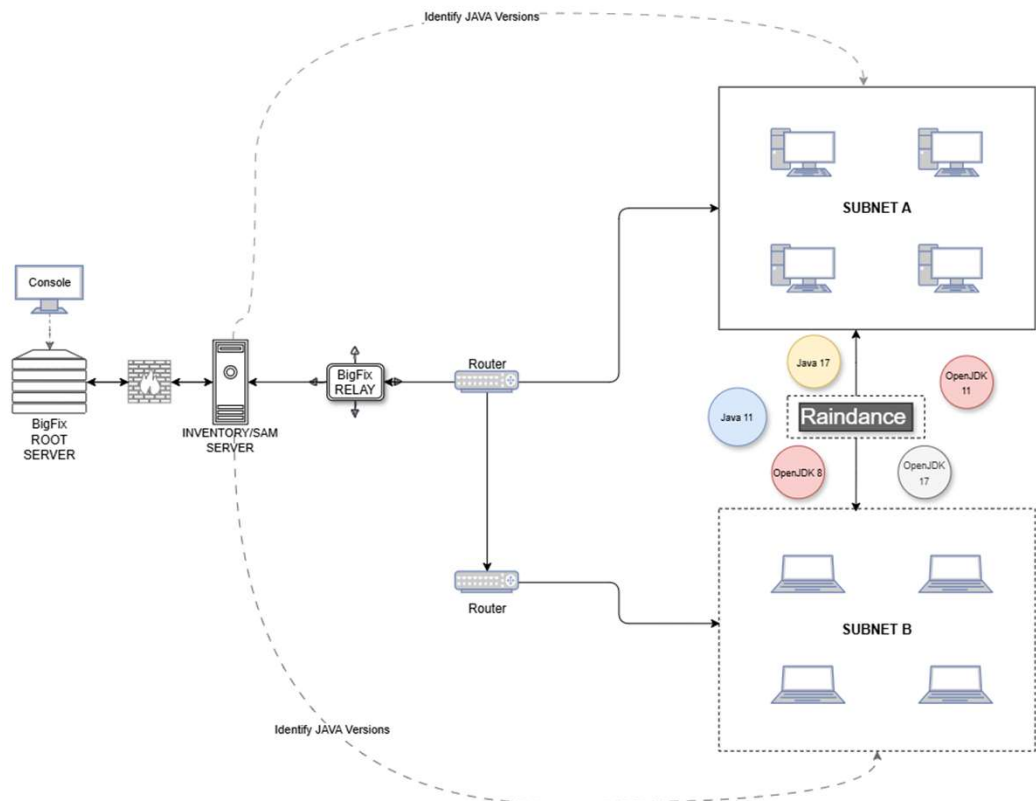


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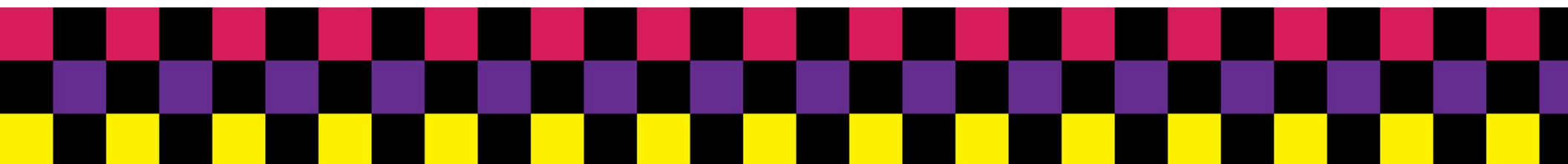


2.3 Systematically identifying and eradicating unwanted software - How we solved the business problem

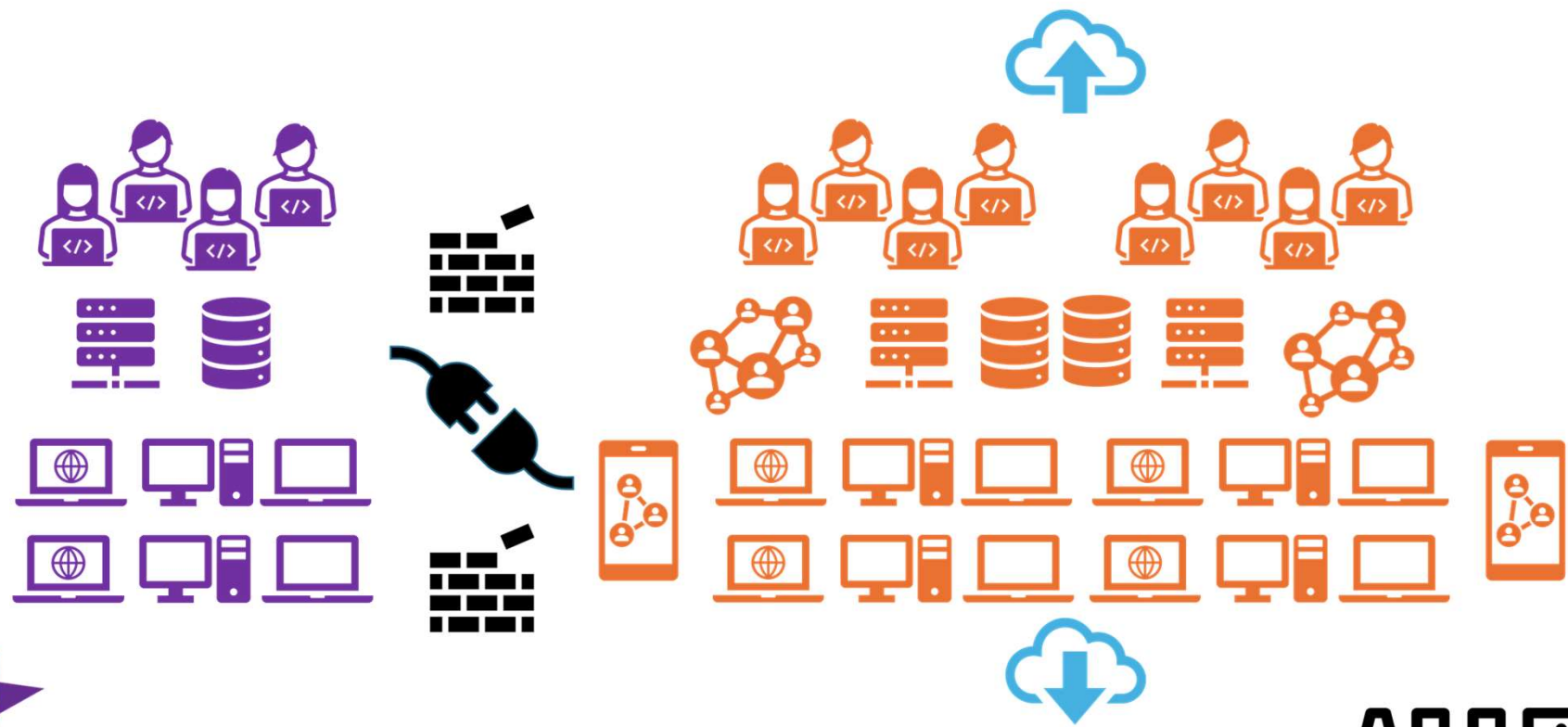


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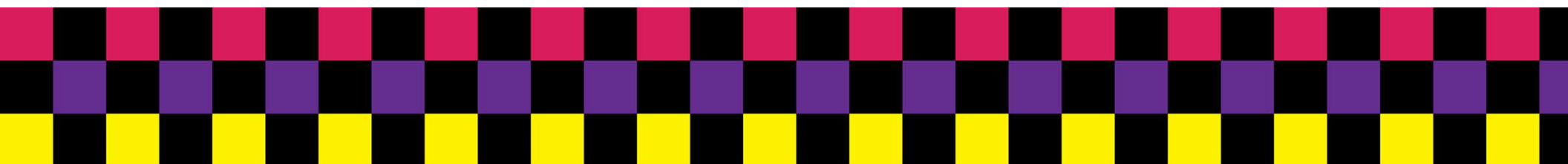


3. Mastering software licensing control in secure, classified networks – What are secure, classified networks?



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3.1 Mastering software licensing control in secure, classified networks – Why should we care?

Data Black Holes

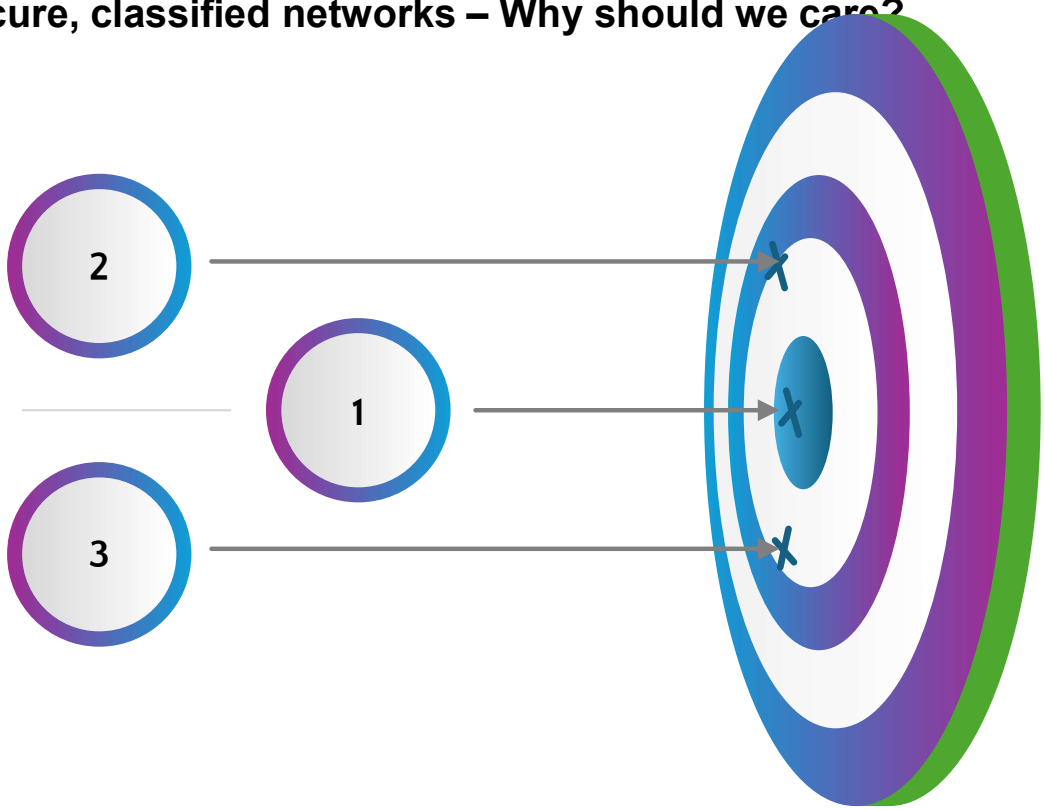
The data remains hidden & attempts to extract are usually met with suspicion

Costs

Not managing regularly and frequently could incur extra costs and risk, no economy of scale

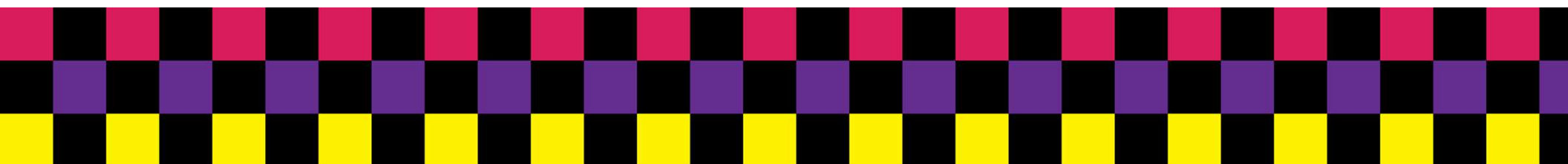
Lack of Standards

Parts of the estate will have very little/nothing in common with the others



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3.2 Mastering software licensing control in secure, classified networks – the business problem

Problem Definition

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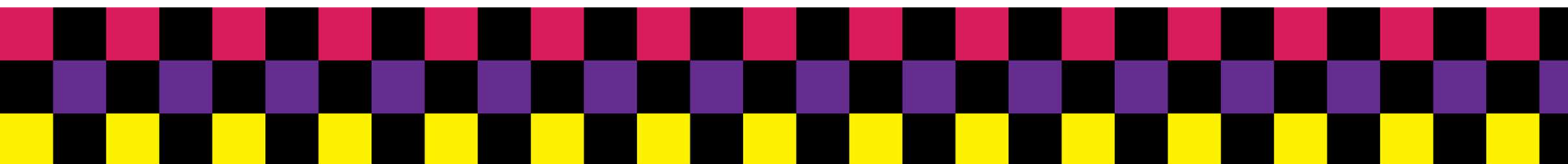
Licensing control in secure, classified networks

- Accurate tracking of software for licensing purposes across the full lifecycle in totally disconnected network(s)
- The disconnected nature makes regular export and import of data a semi-manual process for a subset of the data, with errors and dependencies on human intervention
- Anyone outside the specific disconnected network(s) needing to include or share the data in a greater context, an audit for example
- Manual or semi-manual processes to get data in and out of the disconnected network is inefficient and error prone, and usually simply avoided

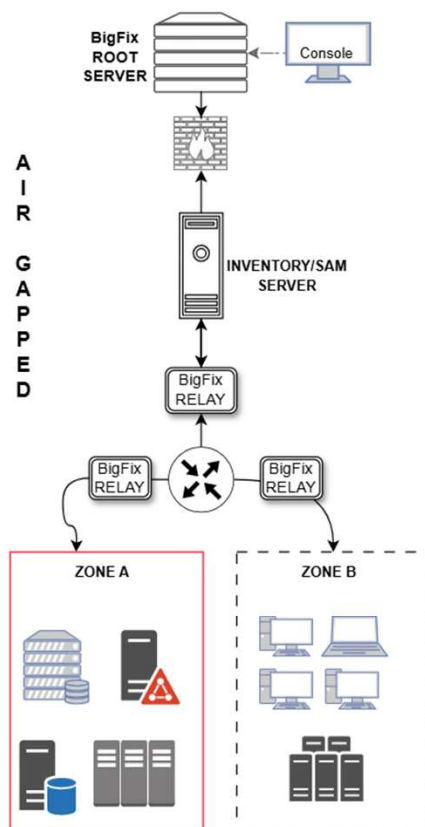


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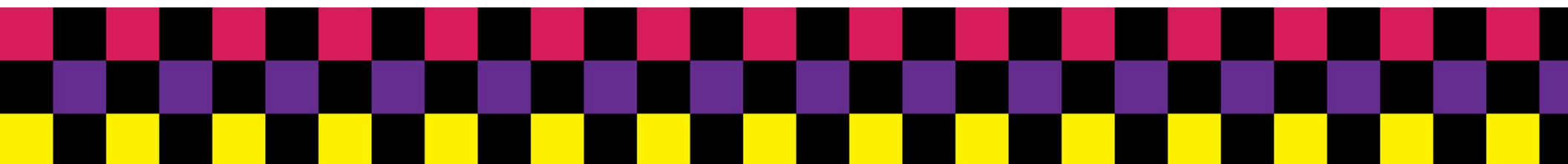


3.3 Mastering software licensing control in secure, classified networks – the business problem



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4. Summary



EMBEDDED

Embedded Systems / IoT visibility and tracking throughout the lifecycle. PoC with Parter & Customer Learnings

- 1 Support for Innovation
- 2 Partner Alignment
- 3 Right Tech is Essential



UNWANTED

Systematically identifying and eradicating unwanted software. No Zombie Software left and expand the process across the estate

- 1 Right starting point
- 2 Use Tech strengths
- 3 Cash, just hard Cash



NETWORKED

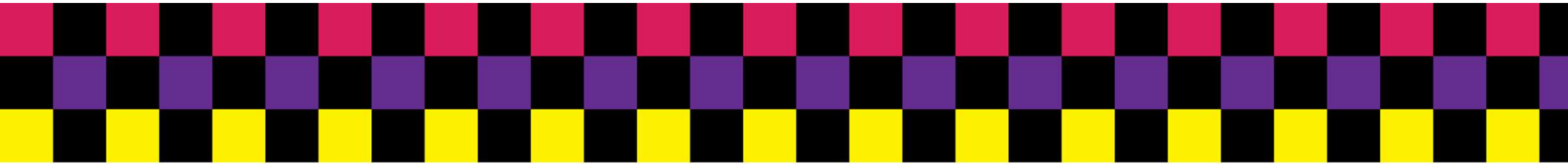
Licensing control in secure, classified networks. Where it exists it's normally a tricky problem to resolve to the organisation's satisfaction

- 1 Understand the problem
- 2 Fix ONLY the problem
- 3 Working well, not fancy



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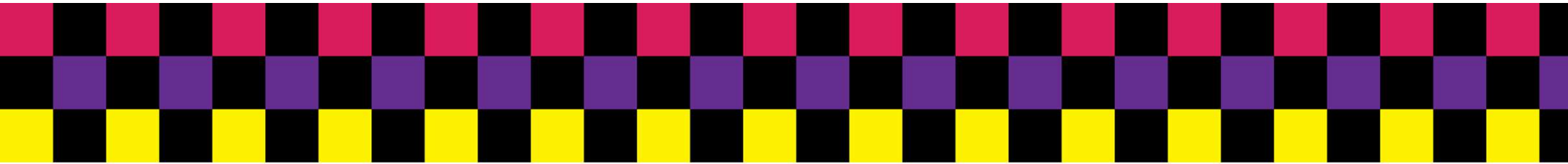
5. Questions, We have.....questions



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References and inspiration to the presentation

The Future of Embedded Systems 2024 and Beyond

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Deloitte on embedded market

[Deloitte](<https://www2.deloitte.com/us/en/pages/risk/articles/software-asset-management-cost-savings.html>)

Explore Top 10 Differences Between Embedded Systems and IoT

[LinkedIn Article by Priyanka Yadav](<https://www.linkedin.com/pulse/explore-top-10-difference-between-embedded-system-iot-priyanka-yadav-nu20c/>)

DOGE vs Software spend

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Deloitte on embedded market

<https://www2.deloitte.com/us/en/pages/risk/articles/software-asset-management-cost-savings.html>

Fortune Business on Embedded

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CONNECTED CARS: TOP 5 IOT AUTOMOTIVE APPS AND HOW TO DEVELOP ONE

[https://easternpeak.com/blog/connected-cars-top-5-iot-automotive-apps-and-how-to-](https://easternpeak.com/blog/connected-cars-top-5-iot-automotive-apps-and-how-to-develop-one/)

develop-one/

HCLSoftware's Technical Partnership with Ferrari

<https://www.hcl-software.com/news/20232505-hclsoftware-technical-partnership-with-ferrari-starts-with-low-code-and-integrated-application-security-solutions?referrer=www.google.com>



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