About me
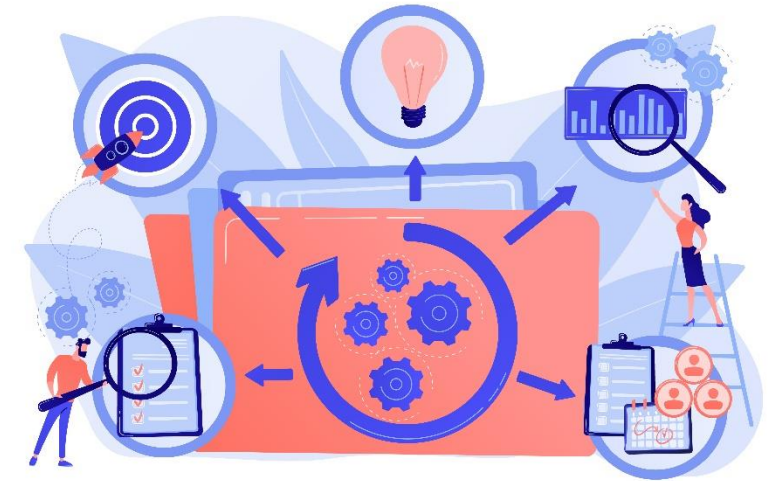
- **José Ruiz:**
- Co-Founder & CTO
- Common Criteria & FIPS 140-2 Expert
- Member of the SCCG (Stakeholder Cybersecurity Certification Group)
- ICCC Program Director
- Editor at thematical group "IACS Cybersecurity certification ".
- Editor at JTC13 WG3: "Cybersecurity Evaluation Methodology for ICT products"

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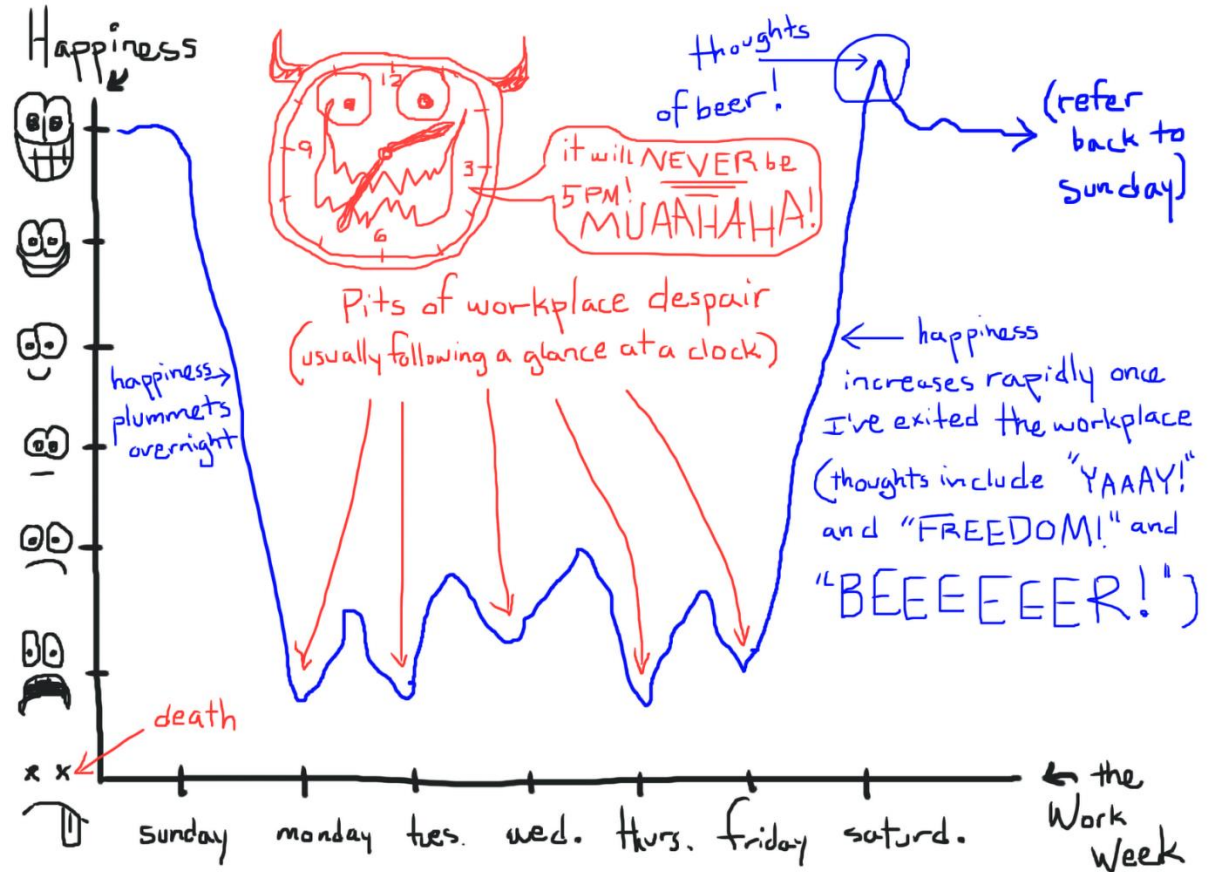"Una manera de hacer Europa"

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Why automatization tools for Common Criteria?

- ❑ **Scalability Issues** in the industry
  - ❑ Not enough engineers in the industry!
  - ❑ We may expect an increase of Cybersecurity certifications in the following years

- ❑ **Reduce Paperwork time** consuming activities!
  - ❑ Less time to obtain the certificate
  - ❑ Lower cost for manufacturers

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Why automatization tools for Common Criteria?

Make Engineers Happy!

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Automation, an old acquaintance

❑ NIST announced a project called, "Automation of the Cryptographic Module Validation Program (CMVP)" for FIPS methodology.

❑ Other labs have done some tools for certain part of the process of Common Criteria, like Lighshipsec, with the creation of a Conformance Automation tool covering the testing part

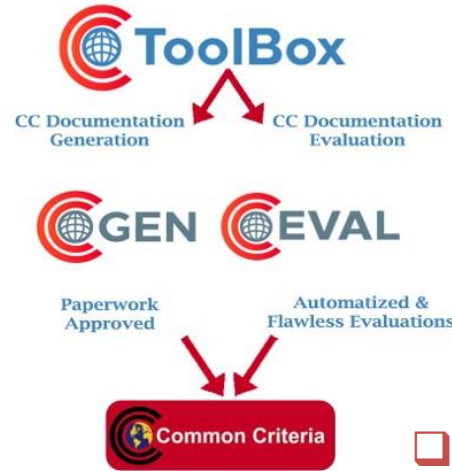❑ NIAP is developing a tool for automating Security Targets.

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Automation, part of our NDA

❑ Developers of **LinceToolbox**, a tool that automates LINCE (Spanish lightweight evaluation and certification methodology for ICT security products)

❑ Currently developing CCCAB, which will allow Common Criteria CABs to smooth the certification process.

❑ Developers of CCToolbox, the all-in-one framework for Common Criteria.

CCToolbox, the all-in-one solution for Common Criteria

ToolBox

CC Documentation Generation → ← CC Documentation Evaluation

GEN   EVAL

Paperwork Approved → Automatized & Flawless Evaluations ←

Common Criteria

❑ Perfect tool for **Developers and Engineers**

❑ **Simplifies** most tedious part, **CC Documentation**

❑ **Ensures** that all the Common Criteria **requirements are met**

❑ **CCGen: 40% save of the CC documentation development time**

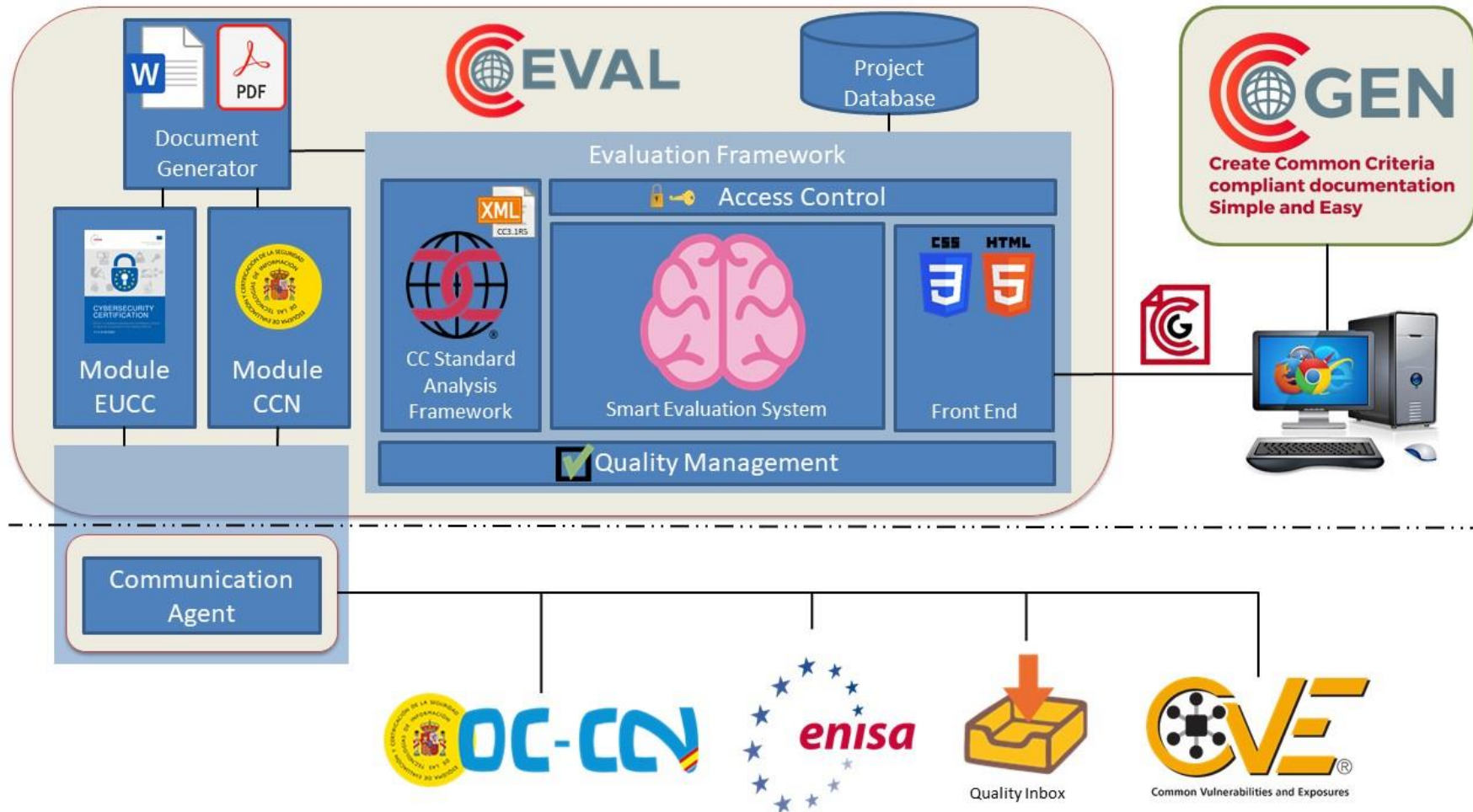❑ Excellent and intuitive tool, aimed at **CyberSecurity labs**

❑ Focused on the **technical aspects offering** evaluation technical report **consistency**
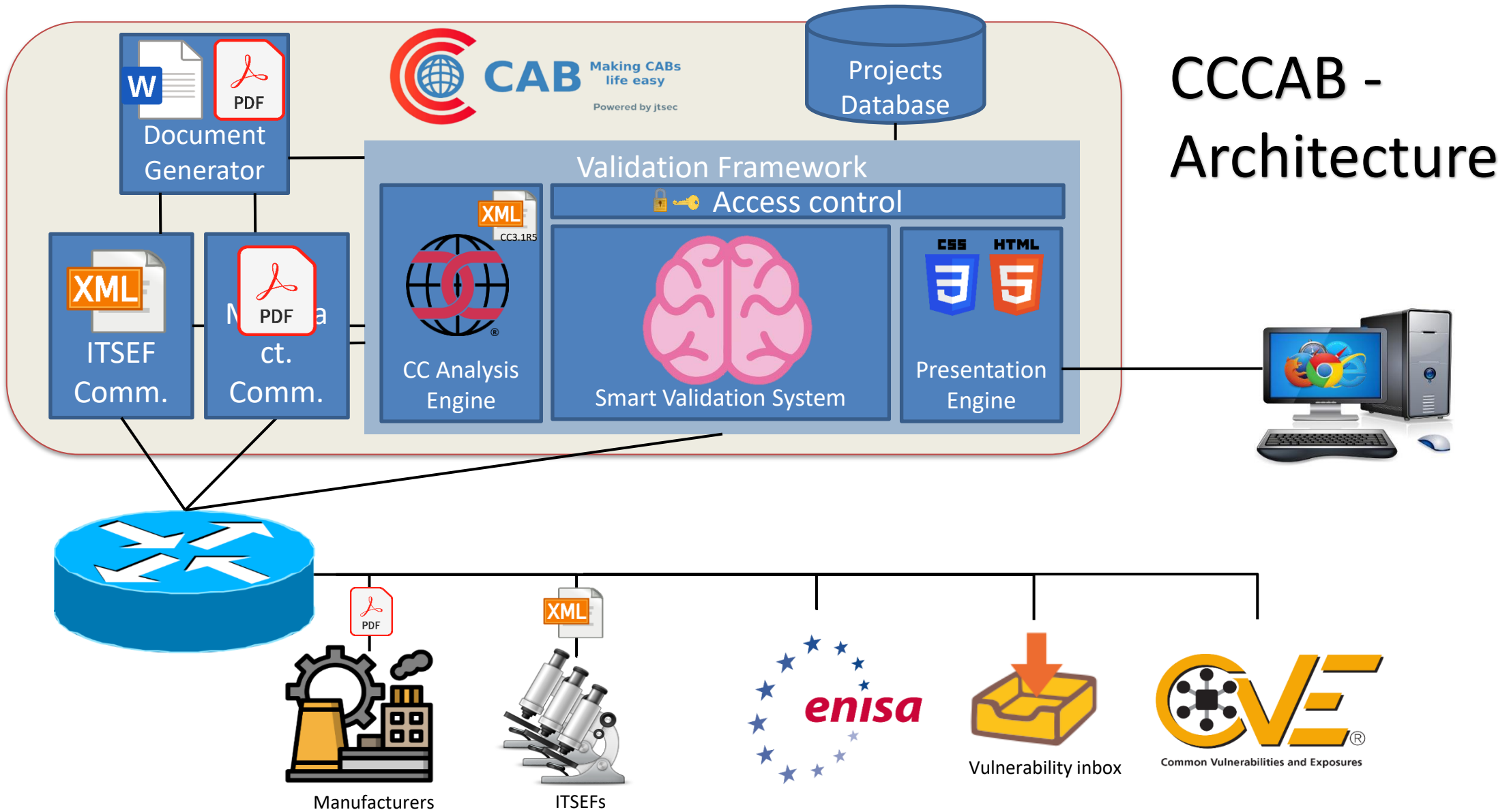
❑ **Automatization** of some of the evaluation activities

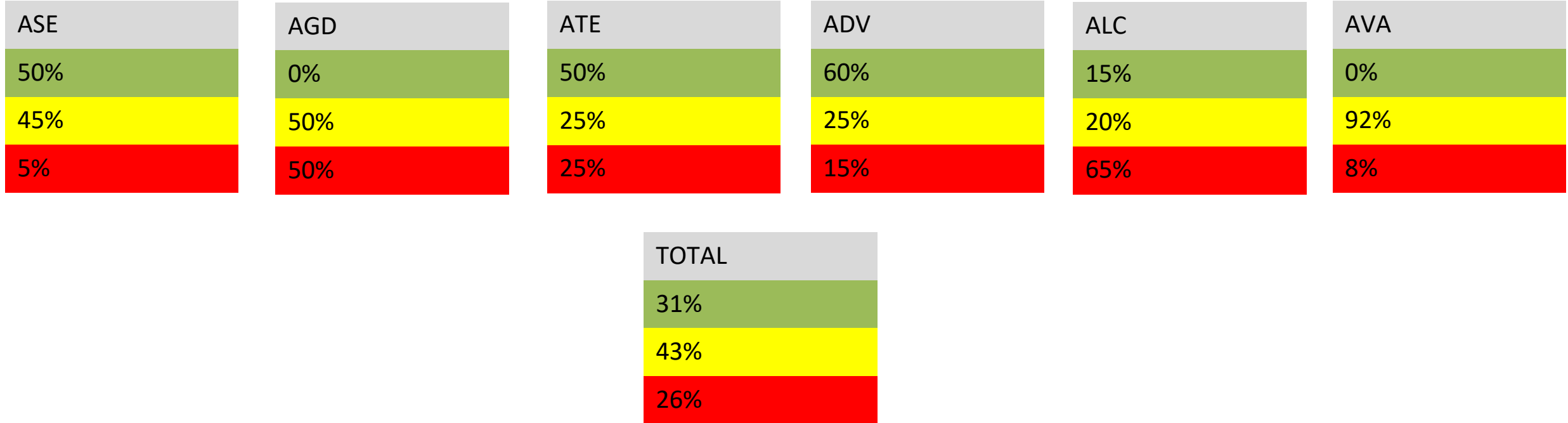❑ **CCEval: Save from 15% to 40% in the evaluation time**

CCEval - Architecture

CCToolBox Benefits

ASE		
50%		
45%		
5%		

AGD		
0%		
50%		
50%		

ATE		
50%		
25%		
25%		

ADV		
60%		
25%		
15%		

ALC		
15%		
20%		
65%		

AVA		
0%		
92%		
8%		

TOTAL
31%
43%
26%

🟩	% of work that will be filled by CCEval and it's not necessary to review the evidence
🟨	% of work that will be filled by CCEval but it's necessary to review the evidence
🟥	% of work that is partially filled by CCEval but it's necessary to add content in the workbook

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CCToolBox Indirect Benefits

- ❑ Added value to your customers
  - ❑ **Increase confidence** that the certification will be smoother and quicker
  - ❑ Make **CCGen available to your customers**

- ❑ Speed up validation process
  - ❑ Forget about **consistency** problems

- ❑ Internal:
  - ❑ Make your **engineers happy:** Let them focus on the real security problems and
  - ❑ Speed up the **learning curve** of engineers

01 **Be on time**
Go faster than your competence. Speed up time on market

02 **Save money**
Manage your Common Criteria certification saving up to 50% costs

03 **100% reliability**
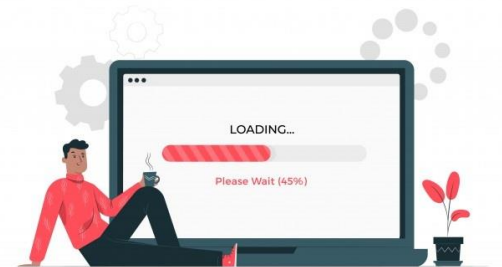Avoid inconsistencies, non conformities on your project

04 **Happy engineers**
Just making Common Criteria easier

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CCToolBox Direct Cost Reduction Simulation

CCGen + CCEval		EAL 2	CCEval	
Evaluation Price	100K		Evaluation Price	100K
Evaluator workload cost for EAL2	60K		Evaluator workload cost for EAL2	60K
CCGen + CCEval reduction (25% of the cost)	*15K*		*CCEval reduction (15% of the cost)*	*9K*
Evaluator workload cost **with** CCGen + CCEval	45K		Evaluator workload cost **with** CCEval	51K

Deployment mode

- ❑ Software as a Service
  - ❑ CCToolbox is available online providing unique access to each user

- ❑ On Premise
  - ❑ Delivery of the CCToolbox appliance with a ready to use product

Packages and features included

Feature	Packages		
	Per project	Yearly	Lifetime
Invoicing by tokens[1]	✓	-	-
Yearly Invoicing	-	✓	-
One Time Payment	-	-	✓
Available On Premise and Software as a Service	✓	✓	✓
No projects limit	✗	✓	✓
Tools updates/improvements included	✓	✓	✗[2]
Bugs fixing	✓	✓	✓
Initial workshop setup	✗	✓	✓
	Perfect for companies that have a reduced number of projects per year	Perfect for companies that have a high number of projects per year and wants to keep the tools up to date.	Perfect for companies that have a high number of projects per year and prefers not to have a yearly payment.

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Conclusions

- ❑ "Old way of doing Cybersecurity Certifications"
  - ❑ Not scalable!
  - ❑ Not attractive for engineers!
  - ❑ Cost-effectiveness Issues

- ❑ Automation – Key factor for the future of Common Criteria
  - ❑ More initiatives/resources are needed!

Contact

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"Any fool can make something complicated. It takes a genius to make it simple."
Woody Guthrie