

Cyber Resiliency Scoreboard™ (CRS™)

Lockheed Martin (LM) integrates full-spectrum cyber capabilities into everything we deliver to our customers. LM introduced the Cyber Resiliency Level® (CRL®) framework in 2019 as the world's first, standard method to measure the cyber resiliency maturity of a weapon system anywhere in its life cycle. In support of the CRL framework, LM created the Cyber Resiliency Scoreboard (CRS) tool to assist customers in making informed decisions in selecting courses of action (CoA) and prioritizing their resources for maximum effect against cyber attacks

Overview

The LM CRS is used to identify the maturity level for each of the six CRL categories: Visibility, Cyber Hygiene, Requirements, Test and Evaluation, Architecture, and Information Sharing (see Figure 1). Each category is split into four levels of increasing maturity: CRL 1 – Ad-hoc, CRL 2 – Managed, CRL 3 – Optimized, and CRL 4 – Adaptive.¹

Cyber Resiliency Level®				
	Least Most			
	CRL® 1	CRL® 2	CRL® 3	CRL® 4
Category	Ad-hoc	Managed	Optimized	Adaptive
Visibility	Limited	Aware	Informed	Predictive
Cyber Hygiene	Basic	Routine	Risk-Based	Self-Correcting
Requirements	Bolted-On	Compliance-Based	Threat-Based	Holistic
Test and Evaluation	Minimal	Standard	Integrated	Effects-Based Modeling
Architecture	Exposed	Hardened	Threat-Resilient	Self-Healing
Information Sharing	Siloed	Program	Domain	Mission Partners

Figure 1. CRL Framework

The CRS consists of a questionnaire and dashboard displaying qualitative and quantifiable performance metrics used to guide stakeholders in selecting COAs for increased cyber resilience of systems from conception through delivery to retirement. Our innovative CRS questionnaire is used to capture inputs from subject matter experts (SMEs) about a system's current state of cybersecurity. Our intuitive dashboard consists of data sets and graphs that can be leveraged to assist stakeholders in assessing and measuring CRL category maturity levels.

Usage

The CRS questionnaire is designed to be completed by SMEs. Once the questionnaire is completed, the data is processed, and the results are displayed via the dashboard (Figure 2).

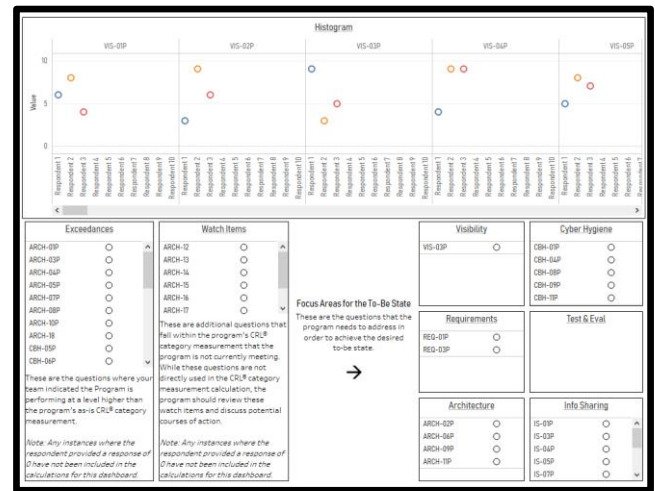


Figure 2. CRS Dashboard

The dashboard metrics provide a CRL category "as-is" and/or "to-be" measurement which is displayed using a radar chart (Figure 3).

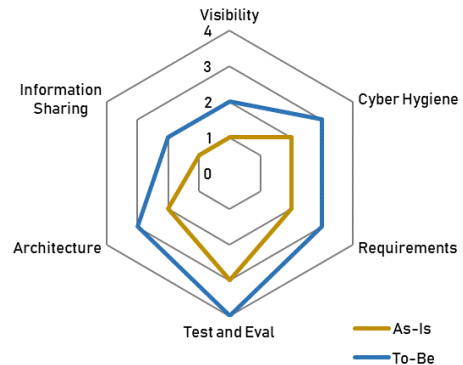


Figure 3. Radar Chart

CRS is easily adaptable to your needs and has been successfully applied to numerous programs across each of our business areas. CRS is a proven tool in mitigating risks and performing cost-benefit analysis for determining which mitigations provide the most cost-effective benefits.

To learn more about how CRS can enable you to assess and improve your program's cyber resiliency, visit lockheedmartin.com/crs and contact us at cyber.resiliency@lmco.com.

¹ Additional information on the Lockheed Martin CRL framework categories and maturity levels is available at lockheedmartin.com/crl.