



AbedGraham

Clinically Optimised Success.

[CCOM²] User Guide (Summary)

[CCOM²] is a cloud-based clinical security analysis platform developed by healthcare professionals specializing in the application of cybersecurity best practice for hospitals and health systems.

The platform works by ingesting raw vulnerability scanner data containing asset details, their corresponding vulnerability identifiers and scores (CVE/CVSS) and then applying a series of algorithms containing hundreds of contextually sensitive parameters, weighting factors and multipliers. This leads to the generation of a series of risk severity metrics for each asset, vulnerability and the overall institution. These metrics are divided across four themes:

Clinical Risk

The severity of potential harm that patients are exposed to at a vulnerability, asset and institutional level.

Organizational Risk

The severity of potential workflow disruption and service shutdown that a hospital or health system is exposed to at a vulnerability, asset and institutional level.

Financial Risk

The severity of potential financial losses and costs that a hospital or health system is exposed to at a vulnerability, asset and institutional level.

Regulatory Risk

The severity of potential contravention of a range of global security standards. For US customers, the primary focus is on the HIPAA Security Management Process Standard and its individual ePHI, security awareness, malicious software protection, evaluation and remediation rules. For non-US customers different regulations are factored in based on regional differences (e.g. EU Medical Device Regulations).

How It Works

Identifying Assets

Once you have selected a plan, all you have to do is log into your secure portal where you will download the [CCOM²] Asset Input Template. Using this, you will upload either gradually, or in one go, all the assets that you want to analyse as a part of your plan.

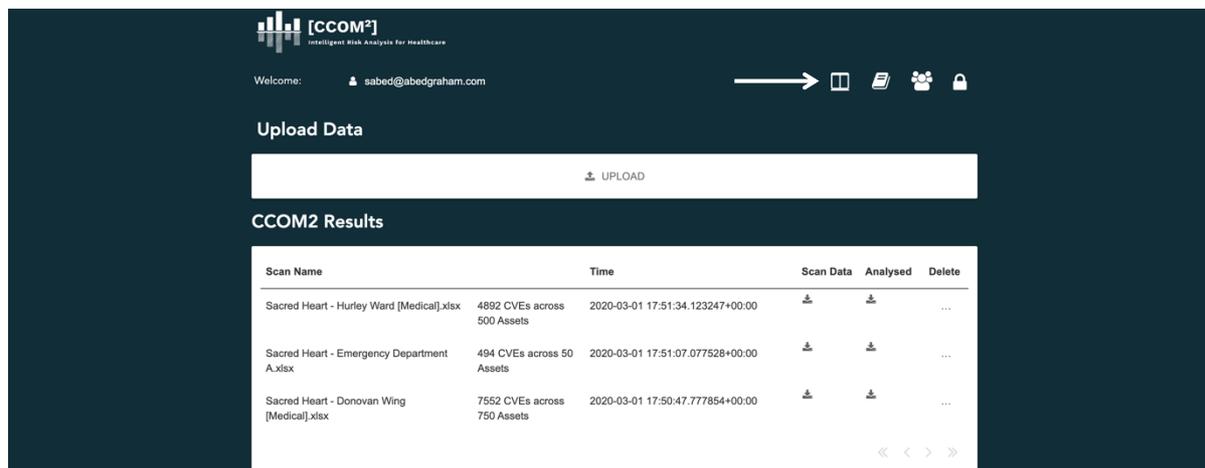


Figure 1

In your secure portal, click the template button (white arrow) to download the Asset Input Template

The main task that needs to be completed at this stage, that traditional scanners cannot handle at a granular level, is assigning a [CCOM²] 'Asset Type' to each identified endpoint. This is the critical step to determine how the algorithmic analysis is conducted.

IP_Address	MAC_Address	Asset_Name	Asset_Type	CVE_ID	CVSS
192.0.2.1	00:25:96:FF:FE:12:34:56	(REMOVE THIS ROW) Dell 475868	Telemonitor - Bedside Monitor	CVE1001	7
			Anaesthetic Machine		
			Autoclave		
			CT Machine		
			Firewall Appliance		
			Heart-Lung Machine		
			Infusion Pump		
			Laboratory Clinical Analyzer		
			Medication Dispensing Cabinet		
			MRI Machine		
			Neonatal Incubator		
			PET Machine		
			PET/CT Machine		

Figure 2

Select a [CCOM²] Asset Type from the dropdown list for each asset you had detected

Example

Your passive/active scanner detects:

'Philips Intellivue MX700'

In the Asset Input Template you will need to match this to one off:

'Telemonitor – Bedside Monitor'

'Telemonitor – Central Nursing Station'

'Telemonitor – Other'

The template has a dropdown menu of 'Asset Categories' that you will use to match each identified endpoint to (e.g. Clinical Workstation, Infusion Pump, MRI Scanner etc.). We recommend you maintain a master file of your asset types. In upcoming versions of the platform, this process only needs to be completed once as after this our [CCOM²] Asset Repository will match future asset and vulnerability data uploads to a category using other identifiers (e.g. Asset Name, MAC Address, IP address). Additionally, this process will be fully automated as we develop APIs with different third party scanning product providers.

Running a [CCOM²] Analysis

When you are ready to run an analysis, give your input file a name you will recognise that describes its contents (E.g. St Joseph's ED; LSU Medical Workstations etc.) and then upload the file using the 'Upload Data' function in your secure portal. A real-time analysis will be run and a CSV report of the results will be generated that you can download from the '[CCOM²] Results' section.

Upcoming releases will include an online dashboard and cumulative trend results reports.