

Cyber Risk Insights (CRI)



PwC's Cyber Risk Insights Will Address These Challenges in a Strategic, Calibrated and Efficient Manner

PwC's Next Generation threat management solution ('Cyber Risk Insights') delivers automated monitoring, protection and remediation measures. The focus is to provide a complete view of the risk landscape and proactively respond to emerging risks.

1 Contextualized Risk-Based Prioritization

Context based risk scoring is the core of 'Cyber Risk Insights' platform which is enabled by threat models, exploitability parameters, external threat feed and patterns generated from organization specific landscape.

2 One Click Risk View across the landscape

Unified dashboards provide holistic view of real time vulnerabilities and support senior management to visualize the risk movement across the organization



3 Agility to integrate new processes

Integrate the associated processes to accelerate the entire discovery, communication and remediation processes

4 Support in Remediation Orchestration

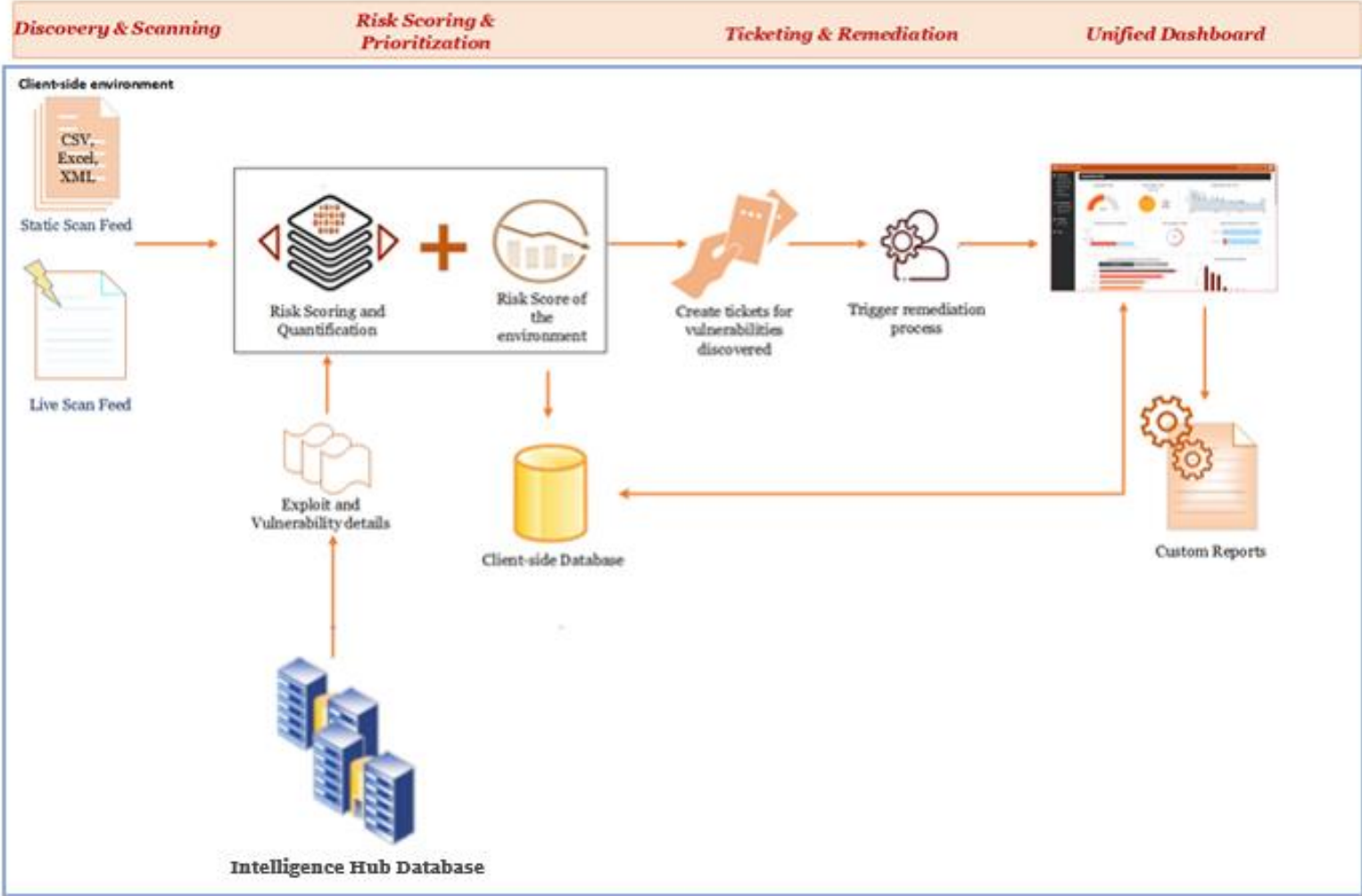
The platform offers an in-built way to track the status of the issue in its remediation workflow, along with capability to integrate with external ticketing systems.

Next Generation Threat Management Solution



Cyber Risk Insights Architecture and Base Technologies

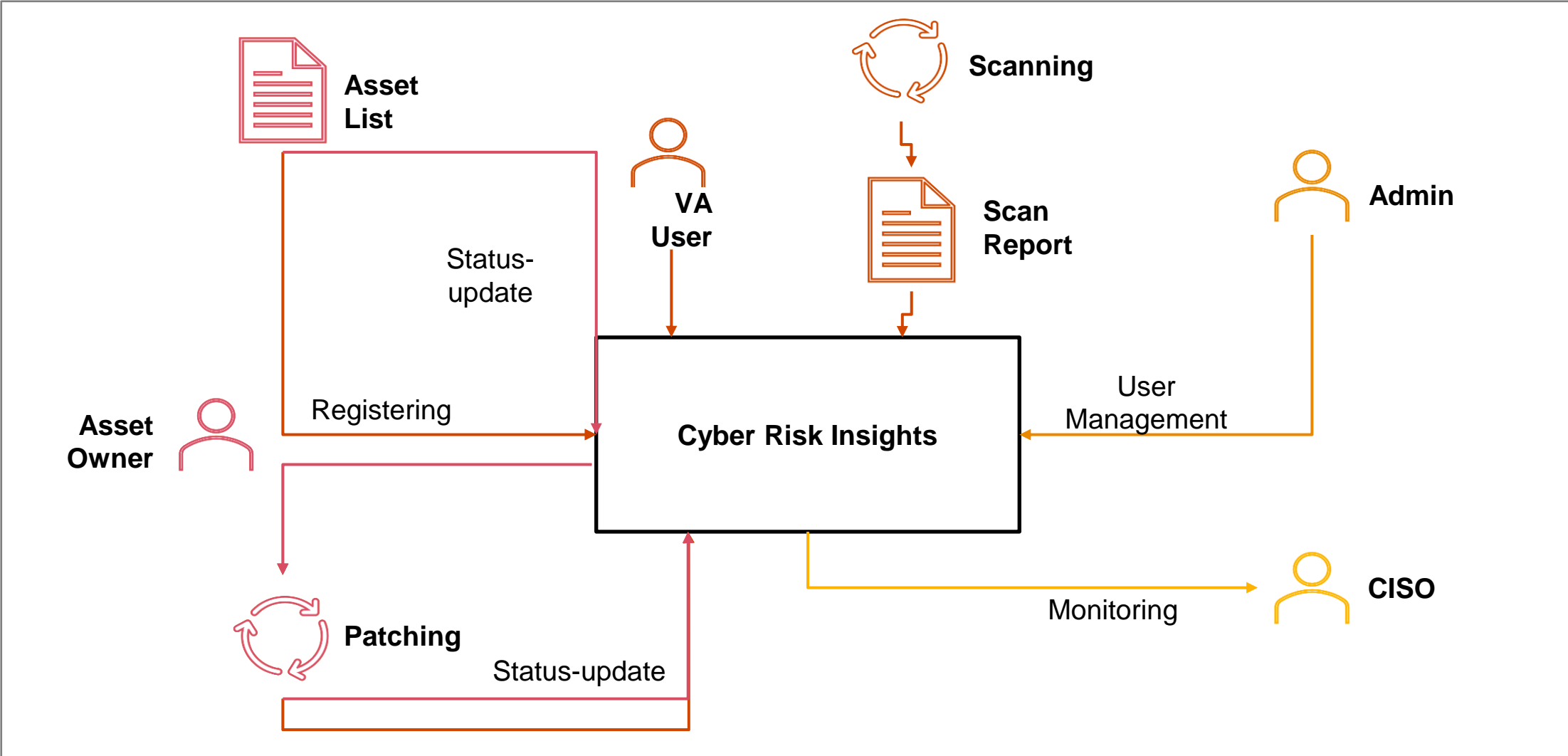
S. No.	Solution Components
1	User Interface built using modern SPA (Single Page Application) UI framework.
2	Dedicated business logic implemented via REST APIs.
3	Multiple data-analytics and automation scripts at the backend
4	Relational Database is integrated in the solution.
5	Dedicated LDAP is integrated in the solution for Identity management.



User Roles in Cyber Risk Insights Tool

Role Name	Role Description	What does the role have access to?
Asset Owner	The asset owner can register assets (applications/ infrastructure) on the CRI application and monitor the assets registered by them.	This role has access to the data pertaining to the specific assets registered by them. Eg: vulnerabilities, trends , etc.
VA Team	This is the vulnerability analyst team member who is responsible for managing scans and related actions on IT assets from the CRI application.	This role has access to all data (except user profile related data) present in CRI application which includes data about the assets registered and the vulnerabilities pertaining to them.
CISO (Chief Information Security Officer)	The CISO is a senior management executive who has a holistic view of the organization's security posture.	This role has access to high level visualizations and charts, reporting metrics for organizational/asset level risks.
Admin	This is the role for managing various configurations in CRI.	The admin manages user access, configures SLAs and business units.

Responsibilities and Workflow in Cyber Risk Insights Tool



Asset Owner Dashboard

The figures below show the asset owner dashboard used to register assets and view security risk posture pertaining to the owner specific applications and infrastructures.

The screenshot displays the PwC Cyber Risk Insights Asset Owner Dashboard. The browser address bar shows the URL 172.19.22.41:8082/owner-apps. The dashboard header includes the PwC logo and the text 'Cyber Risk Insights' on the left, and a welcome message 'Welcome, Owner FN Owner LN' with a notification bell icon on the right. A left-hand navigation menu lists various dashboard sections: Dashboard, Inventory, SLA Status, Your Infrastructure, Your Applications, Infrastructure Risk, Application Risk, and Scan Coverage. Below this menu are sections for 'Add to Inventory' (Add Application, Add Infrastructure) and 'Home'. The main content area is titled 'Applications Registered by You' and includes a 'View Disabled Applications' button. Below this is a sub-section 'View/Edit/Delete Applications' with search and filter icons. A table lists 8 registered applications with columns for Application ID, Application Name, Data Criticality, and Business Criticality. Each row includes edit, delete, and disable icons. The table footer shows 'Rows per page: 10' and '1-8 of 8'.

#	Application ID	Application Name	Data Criticality	Business Criticality			
1	null	AppTestDataSensitivityHigh	Critical	Business Critical			
2	null	AppTest2	High	Business Critical			
3	null	AppTestInternet	High	Business Critical			
4	null	AppTestDataSensitivityLow	Low	Business Critical			
5	null	AppTestFinHigh	High	Business Critical			
6	null	AppTestIntranet	High	Business Critical			
7	null	AppTest1	High	Business Critical			
8	null	AppTestFinLow	High	Business Critical			

VA Team Member Dashboard

The below figures show the dashboard of a VA Team which is used to ingest scan reports, trigger or schedule new scans from the tool to generate risk scores.

The screenshot displays the PwC Cyber Risk VA Team Member Dashboard. A modal window titled "Recent Scans" is open, showing a table of scan details. The dashboard background includes a sidebar with navigation options like "Dashboard", "Feed Ingestion", "Ticketing", and "Reporting".

Recent Scans

Currently showing - Details of last 5 scans.

Recent Scan Details

Target Name	Scan Type	Scanner	Status	Date (MM/DD/YYYY)	Time
AppTestFinHigh	Static Feed	Acunetix	Uploaded	6/17/2021	7:29:06 PM
AppTestFinLow	Static Feed	Acunetix	Uploaded	6/17/2021	7:28:27 PM
AssetTest1	Static Feed	Nessus	Uploaded	6/17/2021	7:16:37 PM

Rows per page: 3 1-3 of 5

Target Type

Application Infrastructure

Target

LWACCPRDDB

Details of Last

5 scans

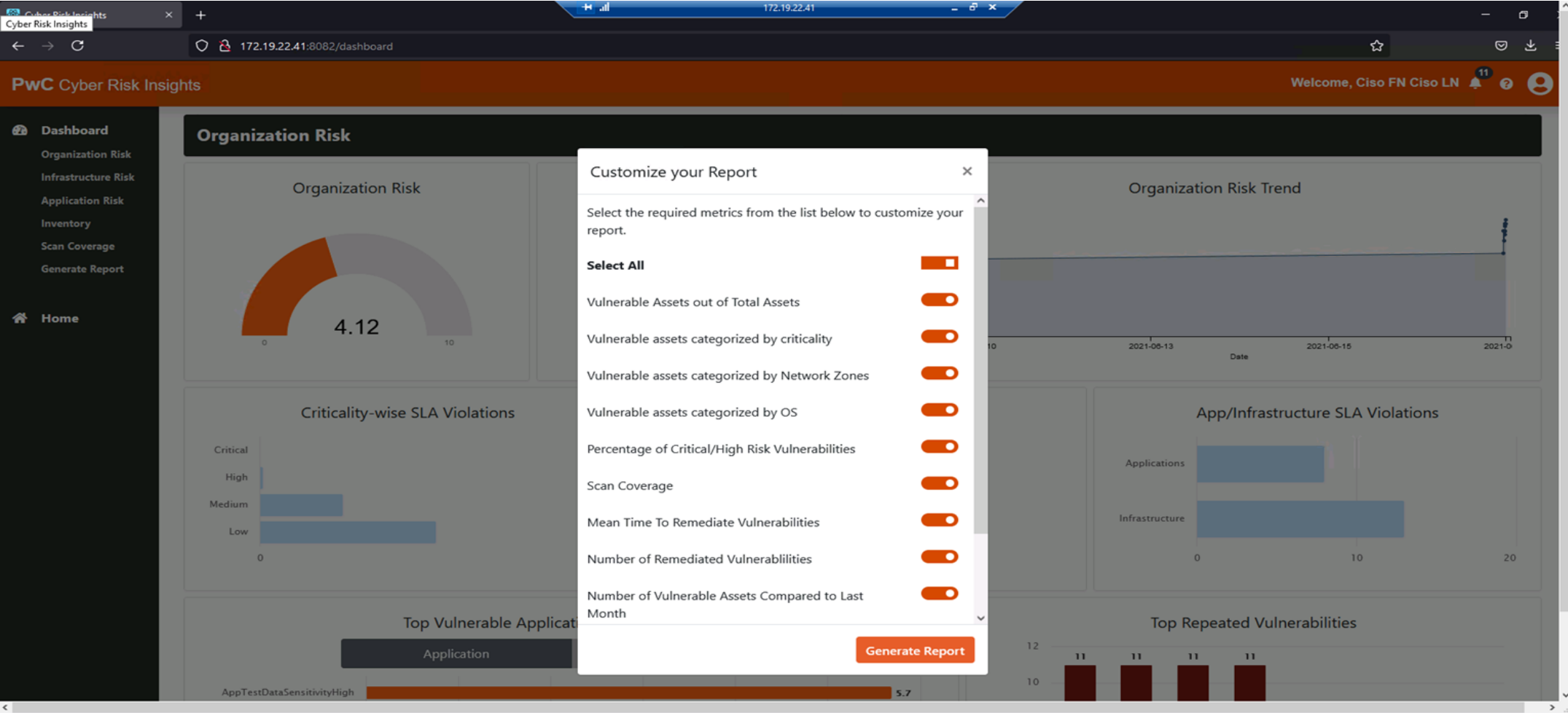
Show

Scan Details

Scan Type	Scanner	Status	Date (MM/DD/YYYY)	Time
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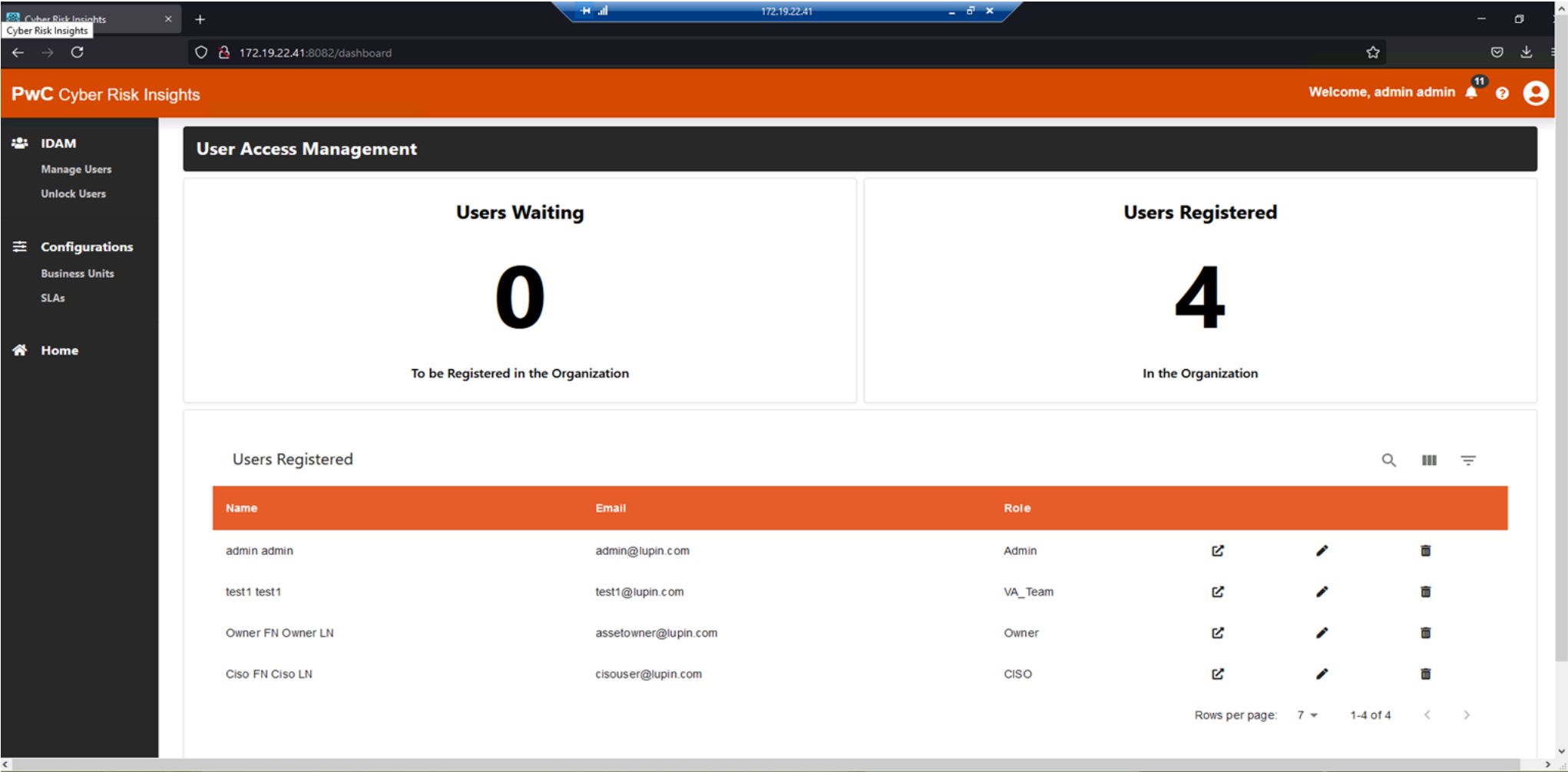
CISO Dashboard

The figures below show the CISO dashboard giving an overall view of the security risk posture of the organization.



Admin Dashboard

The below figure shows the dashboard of Admin who can perform user registration.



Deployment Requirements for CRI Tool

Sr. No.	Software requirements (we can install ourselves if Internet access is present)
1	Java - 8.0 and above
2	Python - https://www.python.org/ftp/python/3.8.6/python-3.8.6-amd64.exe
3	MySQL v8.0.21 - https://downloads.mysql.com/archives/get/p/25/file/mysql-installer-community-8.0.21.0.msi
4	Wkhtmltopdf - https://github.com/wkhtmltopdf/packaging/releases/download/0.12.6-1/wkhtmltox-0.12.6-1.msvc2015-win64.exe
5	OpenLDAP - https://www.maxcrc.de/wp-content/uploads/2020/04/OpenLDAPforWindows_x64.zip
6	Tomcat 9.0 - https://mirrors.estointernet.in/apache/tomcat/tomcat-9/v9.0.44/bin/apache-tomcat-9.0.44-windows-x64.zip
7	Apache Directory Studio - https://archive.apache.org/dist/directory/studio/2.0.0.v20200411-M15/ApacheDirectoryStudio-2.0.0.v20200411-M15-win32.win32.x86_64.exe
8	Node.js - https://nodejs.org/download/release/v14.15.4/node-v14.15.4-win-x86.zip
9	Windows IIS
10	SSL Certificate (nature as suitable)

Sr. No.	Minimum Hardware Requirements
1	16GB RAM
2	256 GB Storage
3	Windows Server OS 2019 or 2016
4	4-core processor
6	Internet Connectivity (or a way to get set-up files of required supporting software)

