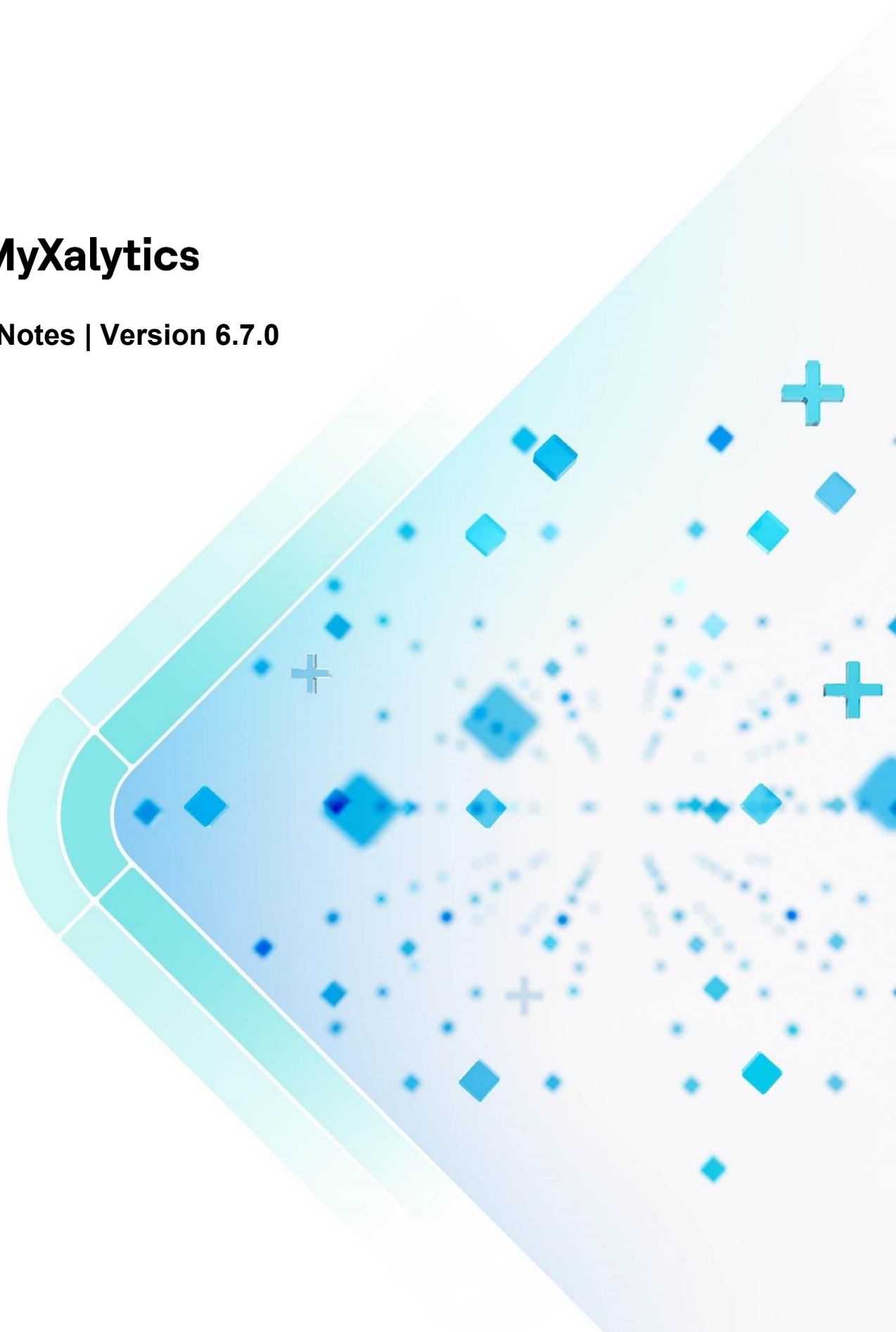


HCLSoftware

HCL MyXalytics

Release Notes | Version 6.7.0



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Document History

S. No	Date	Version	Description
1	October-2025	6.7	MyXalytics_Release_Notes_v6.7

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1. Executive Summary

HCL MyXalytics is a Unified Reporting and Dashboarding solution which helps organizations by providing an unparalleled visibility into performance of IT systems and processes. It helps to provide people and organizations with the clarity they need to drive continuous operational improvements.

HCL MyXalytics offers intuitive visualizations of data from multiple sources on a unified & role based/custom dashboard. Its capabilities include robust reporting of ITSM metrics, governance and control, root cause analysis for all incidents, automated risk management approval workflow and real-time tracking of risks and remediation plans, infused AI-driven predictive analytics to proactively flag potential breaches and crisis automated business reporting, zero-touch automation, reduced SLA violations & improved IT environment predictability.

2. HCL MyXalytics Version 6.7

The latest version of HCL MyXalytics introduces a modernized experience with **new Black and Blue themes**, an **AI-powered dashboard summarization** engine, and **AEX chatbot integration** for natural language data insights.

The latest version also provides enhanced cloud and infrastructure visibility with **OCI billing**, **Kubernetes**, **HP Pure Storage**, and **multi-cloud orphaned resource optimization** integrations. New **visualizations** like EGraph, Funnel, Correlation, and Linear Regression charts deliver richer analytics, while the **NiFi onboarding and management console** streamline data flow automation. Additional updates include **Trusted Advisor insights**, **Sustainability and Financial Indexes**, **enhanced dashboard linkage**, and **security policy updates**, empowering users with deeper intelligence, automation, and operational control across their IT ecosystem.

3. Features and Enhancements

This release includes the following list of features and enhancements.

3.1. Features

- **Theme Implementation**

Added support for Black and Blue themes. Users can now switch between these themes via the Account settings panel. The dark (Black) theme enhances readability in low-light environments, while the Blue theme provides a visually calming interface.

- **Service Catalog Console**

The Service Catalog introduces a centralized access hub, allowing users to discover and launch other enterprise tools directly from a single pane of glass — simplifying navigation and improving user efficiency.

- **Dashboard Summarization**

Incorporate generative AI powered dashboard summarization feature to automatically generate clear, concise, and actionable summaries of dashboard reports. This functionality is designed to streamline the analysis of complex data by turning raw metrics and report outputs into professional insights.

This feature significantly reduces the time spent on manual report interpretation and enhances decision-making by delivering meaningful insights from your dashboard data in real-time.

- **Generative AI augmented Chatbot integration**

It allows users to ask reporting and analytics questions in natural language and receive quick, actionable data insights.

The solution integrates OpenAI's managed LLM service (available via the OpenAI API or Azure OpenAI Service) utilizing GPT-4.1-mini for lightweight tasks and GPT-4o for multimodal, high-fidelity inference workloads.

- **Nifi Onboarding Service**

The NiFi Onboarding Service is an automated ETL (Extract, Transform, Load) solution developed to streamline and manage customer data flow onboarding within the system. This service operates in the background to clone and configure all required data flows based on customer onboarding requirements, ensuring consistency, reliability, and reduced manual effort.

- **Data Collection Management Console**

Developed a web-based management console for NiFi flows, enabling administrators to start, stop, enable, disable, and schedule flow executions with configurable times and durations for improved operational control and automation.

- **OCI Billing and Inventory integrations.**

Developed a seamless integration with Oracle Cloud Infrastructure (OCI) to enable automated, FOCUS (1.0) - compliant billing, comprehensive resource and instance inventory collection, and enhanced visibility into subscriptions, costs, budgets, and budget forecast alerts, improving financial accuracy and cloud cost management.

- **Orphaned Resources & Cost Optimization Recommendations**

- Introduced Orphaned Resource Identification and Recommendations across multi-cloud platforms (AWS, GCP, and Azure) to improve cost optimization and ensure resource hygiene.

Orphaned Resource Identification-

NiFi flows have been configured to continuously monitor and fetch data for services across AWS, GCP, and Azure. These resources are analyzed to detect orphaned or idle resources that are not actively in use but continue to incur costs.

Supported Services

AWS

EBS Snapshots: Check the Creation time to determine the snapshot's age and compare it with the threshold (per HCL MyXalytics logic).

Elastic IPs (Public IPs)- Check <associationId> in the response. If empty, the Elastic IP is not associated with any resource → it is orphaned.

NAT Gateways- A NAT Gateway is orphaned if its NatGatewayId from DescribeNatGateways API is not found in any gatewayId of DescribeRouteTables API.

Storage Volumes- An EBS volume is unused if its API response shows "available", meaning it's not attached to any EC2 instance and can be removed.

GCP

- Snapshots-Check the Creation time to determine the snapshot's age and compare it with the threshold (per HCL MyXalytics logic).
- Storage: If the user's field is missing from the api response, the disk is unattached.
- Public IPs:If status is RESERVED and the users array is empty ([]) from the API Response, the IP is orphaned (not associated with any resource).

Azure

- NAT Gateways-If the subnets or virtual network associations are empty or null, the NAT Gateway is orphaned.
- Public IPs: If ipConfiguration is null from the api response, the IP is orphaned.
- Private Endpoints: If the privateLinkServiceConnections field is empty or null, the private endpoint is orphaned.
- Private DNS Zones: A DNS zone is orphaned if it has no virtual network links in the api response.
- Virtual Network Gateways: If the subnets or virtual network associations are empty or null, the network gateway is orphaned.
- Managed Disks: If the API response shows disk status "Unattached", the disk is not attached to any Azure virtual machine.
- Snapshots: Check the timeCreated to determine the snapshot's age and compare it with the threshold (per HCL MyXalytics logic).
- Firewall: Any firewall not using the Premium SKU in the Azure account.

Benefits:

- See which cloud resources are unused or idle in AWS, GCP, and Azure.
 - Automatically find orphaned resources and calculate their costs.
 - Get clear suggestions on how to save money in the cloud.
 - Reduce unnecessary spending by removing resources that are not being used.
-
- **HP Pure Storage Service.**

Introduced a new DME service named HP Pure Storage Service, designed to integrate with Pure Storage resources and ingest relevant data into predefined destinations for analysis and reporting. This service automates the collection of data from various Pure Storage components, including arrays, volumes, hosts, snapshots, pods, file systems, hardware components, and metrics history.

Customers leverage this data to generate analytical reports, providing actionable insights for corporate stakeholders and enhancing overall storage visibility and decision-making.

- **Kubernetes Integrations**

- **Azure**

- A NiFi agent deployed in the public cloud securely collected inventory data from the private AKS cluster via a jump server in the same VNet, with the server's IP whitelisted for controlled access. Data for clusters, nodes, and pods was sent through the API Gateway to on-premises databases for reporting and usage.

- **GCP**

- A NiFi agent deployed in the public cloud securely collected inventory data from the private GKE cluster using a whitelisted jump server in the same VPC. Data was routed via the API Gateway to on-premises databases for further use.

- **AWS**

- A NiFi agent deployed in the public cloud collected inventory data from the private EKS cluster via a whitelisted jump server in the same VPC. Data was transmitted through the API Gateway to on-premises databases for reporting and usage.

- **Trusted Advisor**

Trusted Advisory Rules consolidates data from multiple sources into a single, actionable view. By leveraging advanced analytics, it provides clear, prioritized insights across key operational areas:

- **Focus** → Highlights critical issues that need immediate attention to reduce risks and ensure business continuity.
 - **Looks Good** → Recognizes systems, processes, or applications that are performing optimally, ensuring confidence in ongoing operations.
 - **Optimize** → Identifies opportunities for improvement, such as cost efficiency, performance tuning, or resource utilization

- **Device Anomaly Detection**

The Device Anomaly NiFi Flow is designed to identify anomalous devices based on their performance metrics (CPU, Memory, etc.). It calculates a baseline for each device, compares it with the latest values, and flags anomalies when deviations exceed thresholds.

- **iAutomate Integration**

Introduced new integration with iAutomate through APIs. Build flows in NiFi to get the data of Incident, change task, SR task, CMDB & runbook master from iAutomate through APIs.

- **Benchmark index data model and integrations**

Introduced BigFix integration to get hardware, software, and product version inventory lists. Identify the compliant/non-compliant hardwares & softwares based on the latest product versions.

- **Sustainability Index (Carbon Emissions)**

Introduced Azure, AWS, and GCP integration to collect carbon emissions data, enabling organizations to monitor and showcase their carbon footprint..

- **Financial Index**

Introduced new Financial Index report that consolidates recommended savings from FinOps recommendations, automations, idea innovations & budgeting. Then providing a unified view of all savings for an organization.

- **New Visualizations:**

Below visualizations are introduced to let users visualize reports in a more intuitive manner..

EGraph Chart: A new visualization “EGraph Chart” is added. With EGraph Charts, users can now create parent-child graph visualizations. This chart type is ideal for visualizing dependencies, break-downs, and structured data flows. The EGraph Chart works by mapping measures based on their parent-child relationships, offering a clear view of how individual components contribute to the overall structure.

Funnel Chart: A new output type “Funnel Chart” is added. With Funnel charts, users can visualize processes that involve sequential stages — such as ticket conversions, event life cycles, and more — in a clear, structured format. This makes it easier to identify drop-off points and optimize performance at each stage of the funnel.

Co-Relation Chart: A new visualization “Co-Relation Chart” is added in the application. With these charts, users can analyze 2 different measures via Merge Query Flow. This makes it easier to identify with the help of colour buckets in which section that resource/ Device lies such as Amber zone, Green Zone or red Zone.

Liner Regression Chart: A new visualization “Linear Regression Chart” is added in the application. With these charts, users can visualize trends with actual data along with upper and lower bounds for better analysis.

- **Explore Your Dataset**
This feature enables users to analyze datasets and gain insights through comprehensive visualizations, with

AI-generated natural language summaries of all dashboard data and visualizations.

- **Dell Apex Alert and Incident Integration.**
Introduced new integration with Dell Apex. Build the alerts and Incidents integrations for below modules.
 - Alerts data collection.
 - Incident data collection.

3.2. Enhancements

- **Dashboard Linkage**

Enhanced the Dashboard Linkage feature to support multi-level and persistent behaviour, enabling more dynamic and interconnected dashboard interactions. The linkage functionality is now fully integrated into both the dashboard cloning and onboarding processes.

- **Linkage applied on Saving plan page**

Based on the configured setup, users can now navigate to a specific dashboard from the Saving Plan page and return back seamlessly.

Details on how to set up this configuration are documented in the Admin Guide.

- **Detail Output Type Enhancement**

- Developed a new option that displays record details in a card-based layout, enhancing data readability and visual clarity. This improvement provides a more intuitive and user-friendly presentation of detailed information, supporting better data analysis and user experience.
- Enabled dashboard linkage for one of the options available in the Detail Output Type template.
- Introduced a configurable default sorting feature in the template’s first detail view, allowing users to select a preferred sort column (dimension) and define the sort order as either Ascending (ASC) or Descending (DESC). Previously, sorting was automatically applied based on the first column; this enhancement provides greater flexibility, customization, and control over how detailed data views are organized and presented.

- Introduced a feature that allows users to click values in the first column to view corresponding data in a pop-up. JSON data is displayed as a table, while other formats appear as raw text. Users can select which column is bound to the first column via a dropdown, and the feature can be enabled or disabled within the report builder, enhancing data exploration and usability.
- **Score and Trend Template Enhancement**

Enhanced the Score and Trend template to allow users to view trends based on a selected date dimension, such as “This Month,” “This Year,” or “Quarter.” The chart dynamically updates according to the chosen chart type and position, providing relevant and well-structured visualizations for effective time-based data analysis.
- **Geo Health Enhancement**
 - Location symbols are now available at the Country level without requiring selection from the Location Column, as the latitude and longitude are retrieved directly based on the Country name. However, at the State level, if location symbol/data is needed, the Location column must be selected from the Location dropdown, as per the existing functionality.
 - Enabled Dashboard Linkage Geo Health on both Country and State Map, New property to enable/disable linkage. This feature can be used in the home page for a saved report, Based on the configuration it will navigate to a specific dashboard/view from the current report and can return back using breadcrumb.
 - Option enabled to see the impacted resource count (measure) for a particular region/location in map label suffix.
- **Relational Template Enhancement**
 - Introduced a new property in the Report Builder that allows users to set the number of records displayed per row for first-level widgets, with options ranging from 1 to 5. Additional widgets automatically wrap to the next row when the limit is exceeded, ensuring a clean and organized layout.
 - Users can now view Insights by clicking directly on a resource CI, instead of using a separate icon. Two actions will be triggered on resource click, Show Alerts and Open Insights. Insights are disabled on the Report Builder page, they are only available on the Home Page.
- **Gauge Visualization**
 - Dimension selection is not mandatory for Gauge visualization. Gauge visualization will display an overall value based solely on the selected measure.
 - Dashboard Linkage is enabled for this template, with Dimension added it will redirect with filter, without Dimension it will redirect without filter
- **Tile Visualization**

- Users can create the headerless reports in the application, Linkage to other Dashboards can be done from tile visualization.

- **EbarChart Visualization Enhancement**

- A new chart type, SplineArea, has been added to the Y-Axis Type options in the EbarChart component.
- The feature that visually distinguishes future data points by rendering the line as dashed beyond the current date is currently supported only for charts with a single dimension and a single measure.

- **Enhanced for Tile and Score And Trend Visualization**

- Dashboard linkage is enabled in the visualization.

- **Budget Page Batch Processing Enhancement**

The Budget page now incorporates a batch processing mechanism to handle large volumes of data more efficiently. Using the configurable BudgetBatchSize key, records are divided into manageable batches, enabling smoother processing and reliable storage in the database. This enhancement optimizes system performance and scalability, especially for extensive budget datasets.

- **Conditional Budget Filter in Alert Rule Configuration**

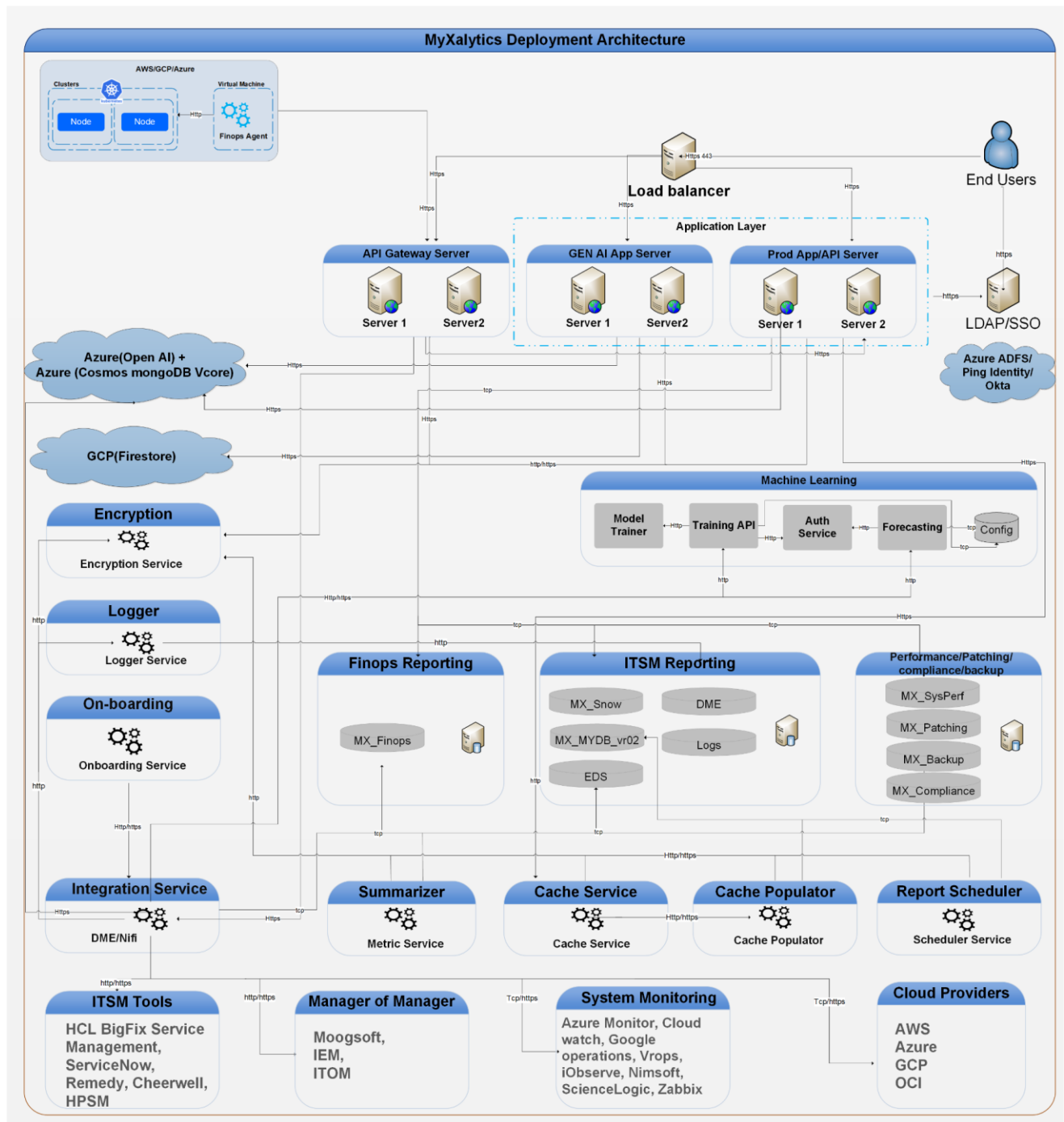
Alert Rule module enhanced with dynamic support for Budget Filters. This update improves the precision and flexibility of budget-based alerts, allowing teams to better monitor specific segments within their budgets.

- **Security Enhancement: Content Security Policy Update**

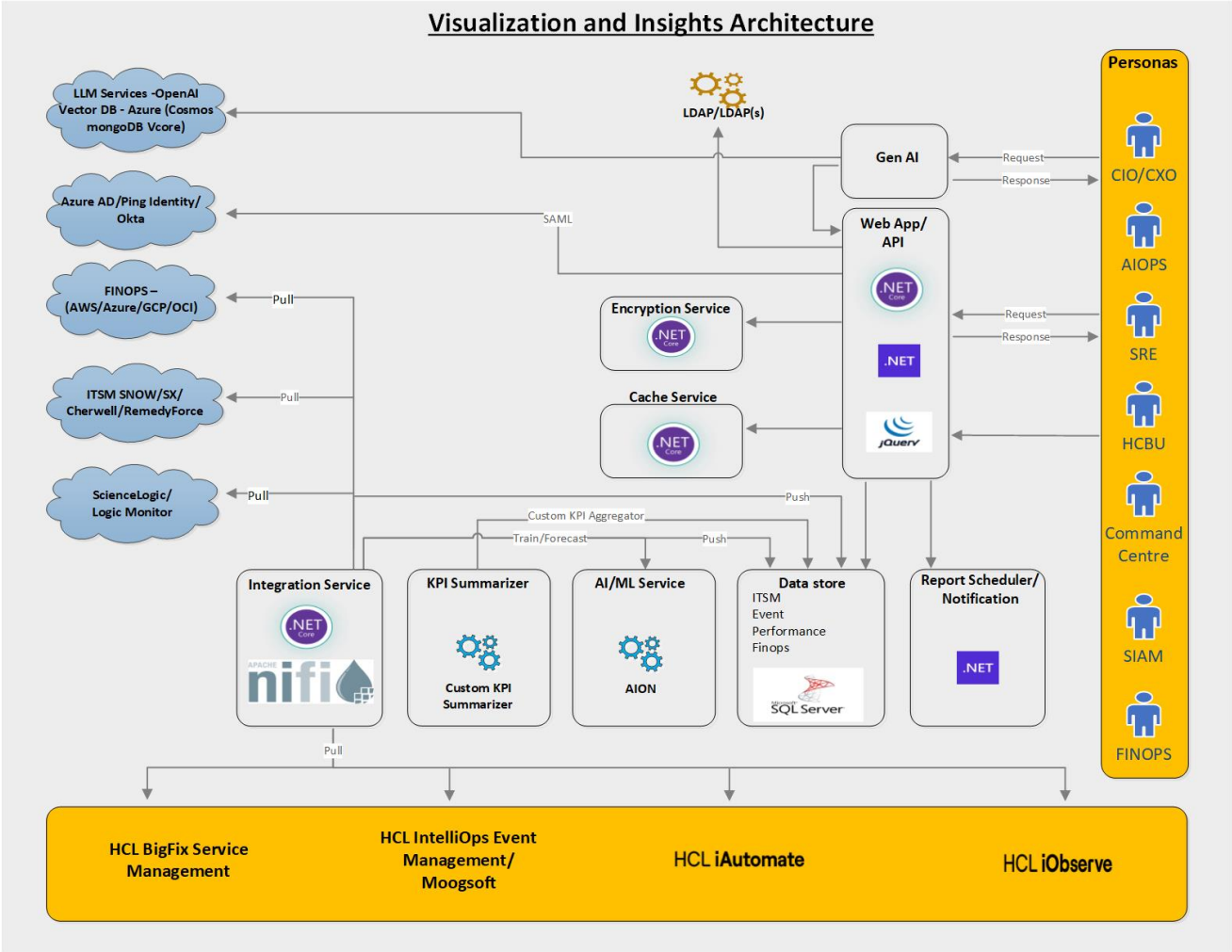
As a security enhancement, the application's Content Security Policy (CSP) has been updated. This change modifies the loading mechanism for scripts and styles on key pages to strengthen defenses against web-based attacks. Functionality is not impacted by this change.

4. HCL MyXalytics Deployment Architecture

HCL MyXalytics currently supports deployment on VM infrastructure which can be hosted either in on-premise or public cloud environments.



5. HCL MyXalytics Reference Architecture



6. Secure Release Checklist and Reports

6.1. Release Checklist

	Criteria	Status	Improvement / Comments
Release Deliverables and Tasks			
Feature development for current release completed and verified	Pass/Fail	☑	
Quality objectives have been met for current release (including Unit/Functional/Load testing)	Pass/Fail	☑	

Export Classification with Country specific import requirements completed	Pass/Fail	✓	
Certificate of Originality Approved	Pass/Fail	✓	
OneTrust Product Privacy Assessment Approved	Pass/Fail	✓	
Threat Model and Secure Design Review	Pass/Fail	✓	
Security Testing - SAST	Pass/Fail	✓	
Security Testing - DAST	Pass/Fail	✓	
Security Testing – Pen Testing for OWASP Top 10 for Web and Gen AI	Pass/Fail	✓	
Open Source Vulnerability scanning via Mend	Pass/Fail	✓	
Security Hotspot, Code smell and Code quality analysis using SonarQube	Pass/Fail	✓	
Service Description document completed with HCLSW Legal	Pass/Fail	✓	
New Release Training delivered to PS and support team	Pass/Fail	✓	
Pricing approvals and CRM part code creation completion	Pass/Fail	✓	
Marketing activities completion (including GTM collaterals , Launch webinars, Sales enablement sessions etc).	Pass/Fail	✓	
Online Product documentation and lifecycle page update	Pass/Fail	✓	

6.2. Packages included in HCL MyXalytics

This section lists all core packages included in HCL MyXalytics, along with their license type, category, version, and description..

Category	Number of Packages
HCL MyXalytics Core	146
AI/ML Toolkit	111

Gen AI Component	79
Total	336

HCL MyXalytics Core Package List

Package Name	Version	Description	License Type
AjaxControlToolkit	20.1.0	A library of controls and extenders for ASP.NET	BSD-3-Clause
DocumentFormat.OpenXml	2.16.0	Library for manipulating Open XML documents	MIT
DocumentFormat.OpenXml.Framework	3.0.0	Framework for OpenXml file handling	MIT
Elastic.Apm	1.25.3	Elastic APM .NET Agent - Application Performance Monitoring	Apache-2.0
Elastic.Apm.AspNetFullFramework	1.25.3	ASP.NET Full Framework support for Elastic APM	Apache-2.0
ExcelDataReader	3.6.0	Library for reading Excel files	MIT
ExcelDataReader.DataSet	3.6.0	Extension for ExcelDataReader to read as DataSet	MIT
Microsoft.AspNet.Cors	5.3.0	CORS support for ASP.NET Web API	Apache-2.0
Microsoft.AspNet.Mvc	5.3.0	ASP.NET MVC framework	Apache-2.0
Microsoft.AspNet.Razor	3.3.0	Razor view engine for ASP.NET	Apache-2.0
Microsoft.AspNet.WebApi	5.3.0	ASP.NET Web API framework	Apache-2.0
Microsoft.AspNet.WebApi.Client	6.0.0	HTTP client libraries for ASP.NET Web API	Apache-2.0
Microsoft.AspNet.WebApi.Core	5.3.0	Core components for ASP.NET Web API	Apache-2.0
Microsoft.AspNet.WebApi.Cors	5.3.0	CORS support for ASP.NET Web API	Apache-2.0
Microsoft.AspNet.WebApi.Owin	5.3.0	OWIN implementation for ASP.NET Web API	Apache-2.0
Microsoft.AspNet.WebApi.OwinSelfHost	5.3.0	Self-host support for ASP.NET Web API using OWIN	Apache-2.0
Microsoft.AspNet.WebApi.WebHost	5.3.0	Web hosting for ASP.NET Web API	Apache-2.0
Microsoft.AspNet.WebPages	3.3.0	Web Pages framework for ASP.NET	Apache-2.0
Microsoft.Bcl.AsyncInterfaces	8.0.0	Provides the IAsyncEnumerable<T> and IAsyncDisposable interfaces	MIT

Microsoft.CodeDom.Providers.DotNetCompilerPlatform	4.1.0	.NET Compiler Platform ("Roslyn") support for ASP.NET	MIT
Microsoft.Diagnostics.Tracing.TraceEvent	3.1.8	Library for ETW (Event Tracing for Windows)	MIT
Microsoft.IdentityModel.Abstractions	7.3.1	Abstractions for Microsoft Identity model components	MIT
Microsoft.IdentityModel.JsonWebTokens	7.3.1	JSON Web Token (JWT) handling	MIT
Microsoft.IdentityModel.Logging	7.3.1	Logging support for Microsoft Identity model	MIT
Microsoft.IdentityModel.Tokens	7.3.1	Security token handling	MIT
Microsoft.Owin	4.2.2	OWIN implementation for Microsoft .NET	Apache-2.0
Microsoft.Owin.Host.HttpListener	4.2.2	HTTP listener for OWIN	Apache-2.0
Microsoft.Owin.Host.SystemWeb	4.2.2	OWIN server for ASP.NET	Apache-2.0
Microsoft.Owin.Hosting	4.2.2	Hosting components for OWIN	Apache-2.0
Microsoft.Owin.Security	4.2.2	Security components for OWIN authentication	Apache-2.0
Microsoft.Owin.Security.Cookies	4.2.2	Cookie-based authentication for OWIN	Apache-2.0
Microsoft.Owin.Security.Jwt	4.2.2	JWT authentication for OWIN	Apache-2.0
Microsoft.Owin.Security.OAuth	4.2.2	OAuth 2.0 authentication for OWIN	Apache-2.0
Microsoft.Web.Infrastructure	2.0.1	Infrastructure components for ASP.NET web applications	MS-NET-Library
Microsoft.Win32.Registry	5.0.0	Windows Registry API access	MIT
Newtonsoft.Json	13.0.3	JSON framework for .NET	MIT
Newtonsoft.Json.Bson	1.0.2	BSON support for Newtonsoft.Json	MIT
Owin	1	OWIN (Open Web Interface for .NET) specification	Apache-2.0
OwinHost	4.2.2	OWIN host components	Apache-2.0
PagedList	1.17.0.0	Pagination support for .NET	MIT
PagedList.Mvc	4.5.0.0	MVC HTML helpers for PagedList	MIT
SAMLComponentV20	7.0.0	SAML 2.0 implementation	Proprietary
System.Buffers	4.5.1	Buffer management in .NET	MIT
System.Collections.Immutable	8.0.0	Immutable collections	MIT

System.Diagnostics.DiagnosticSource	8.0.0	Diagnostics functionality	MIT
System.Diagnostics.PerformanceCounter	8.0.0	Performance counter API	MIT
System.IdentityModel.Tokens.Jwt	7.3.1	JWT handling for System.IdentityModel	MIT
System.IO	4.3.0	IO primitives	MIT
System.Memory	4.5.5	Memory and span-related functionality	MIT
System.Net.Http	4.3.4	HTTP client libraries	MIT
System.Numerics.Vectors	4.5.0	Vector types support	MIT
System.Reflection.Metadata	8.0.0	Access to metadata information	MIT
System.Runtime	4.3.1	Core runtime interfaces	MIT
System.Runtime.CompilerServices.Unsafe	6.0.0	Unsafe code capabilities	MIT
System.Security.AccessControl	6.0.0	Access Control capabilities	MIT
System.Security.Cryptography.Algorithms	4.3.1	Cryptographic algorithm implementations	MIT
System.Security.Cryptography.Encoding	4.3.0	Cryptographic encoding support	MIT
System.Security.Cryptography.Primitives	4.3.0	Cryptographic primitives	MIT
System.Security.Cryptography.X509Certificates	4.3.2	X.509 certificate handling	MIT
System.Security.Principal.Windows	5.0.0	Windows security principals	MIT
System.Text.Encodings.Web	8.0.0	Web encoding utilities	MIT
System.Text.Json	8.0.5	JSON handling for .NET	MIT
System.Threading.Tasks.Dataflow	8.0.0	TPL Dataflow library	MIT
System.Threading.Tasks.Extensions	4.5.4	Task extensions	MIT
System.ValueTuple	4.5.0	ValueTuple types for .NET	MIT
coverlet.collector	6.0.4	Cross platform code coverage tool for .NET	MIT
KubernetesClient	17.0.14	Client library for the Kubernetes REST API	Apache-2.0
Microsoft.AspNetCore.Http.Abstractions	2.3.0	ASP.NET Core HTTP abstractions used for application building	MIT
Microsoft.CSharp	4.7.0	Provides support for compilation and code generation using C#	MIT

Microsoft.EntityFrameworkCore	8.0.17	Entity Framework Core is a modern object-database mapper for .NET	MIT
Microsoft.EntityFrameworkCore.SqlServer	8.0.17	Microsoft SQL Server database provider for Entity Framework Core	MIT
Microsoft.Extensions.Caching.Abstractions	9.0.7	Caching abstractions for in-memory cache and distributed cache	MIT
Microsoft.Extensions.Configuration.Abstractions	9.0.6	Abstractions of key-value pair based configuration	MIT
Microsoft.Extensions.Hosting.WindowsServices	9.0.6	Enables support for hosting applications as Windows Services	MIT
Microsoft.NET.Test.Sdk	17.8.0	The MSBuild targets and properties for building .NET test projects	MIT
Moq	4.20.72	The most popular and friendly mocking library for .NET	BSD-3-Clause
NEST	7.17.5	Official high-level Elasticsearch .NET client	Apache-2.0
Newtonsoft.Json	13.0.3	Popular high-performance JSON framework for .NET	MIT
NUnit	3.14.0	NUnit is a unit-testing framework for all .NET languages	MIT
NUnit.Analyzers	3.9.0	Code analyzers for NUnit test projects	MIT
NUnit3TestAdapter	4.5.0	NUnit3 Test Adapter for Visual Studio and dotnet-test	MIT
Serilog	4.3.0	Simple .NET logging with fully-structured events	Apache-2.0
Serilog.AspNetCore	9.0.0	Serilog integration for ASP.NET Core	Apache-2.0
Serilog.Expressions	5.1.0-dev-02301	Adds support for filtering and enrichment using structured expressions	Apache-2.0
Serilog.Sinks.Async	2.1.0	Asynchronous sink wrapper for Serilog	Apache-2.0
Serilog.Sinks.Console	6.0.1-dev-00953	Writes Serilog events to the system console	Apache-2.0
Serilog.Sinks.File	7.0.0	Writes Serilog events to text files	Apache-2.0
Serilog.Sinks.MSSqlServer	8.2.0	Writes Serilog events to SQL Server tables	Apache-2.0
Swashbuckle.AspNetCore	6.6.2	Swagger tools for documenting APIs built on ASP.NET Core	MIT
System.Configuration.ConfigurationManager	9.0.7	Provides classes to manage user and machine configuration files	MIT

System.Data.DataSetExtensions	4.5.0	Provides LINQ support for DataSet and related classes	MIT
System.Data.SqlClient	4.9.0	Data provider for SQL Server	MIT
System.Formats.Asn1	9.0.0	Provides ASN.1 (Abstract Syntax Notation One) encoding and decoding	MIT
System.Text.Json	9.0.6	Provides high-performance JSON processing functionality	MIT
YamlDotNet	16.3.0	YAML parser and serializer for .NET	MIT
AutoFixture	4.18.1	AutoFixture is an open source library for .NET designed to minimize the 'Arrange' phase of your unit tests in order to maximize maintainability.	MIT
Azure.Identity	1.12.0	This library provides Azure Active Directory token authentication support across the Azure SDK.	MIT
coverlet.collector	6.0.1	Cross platform code coverage tool for .NET.	MIT
Elastic.Apm.NetCoreAll	1.26.0	Elastic APM .NET agent. This package contains the ASP.NET Core auto instrumentation feature.	Apache-2.0
FluentAssertions	6.12.0	A fluent API for asserting the results of unit tests that targets .NET Framework 4.7, as well as .NET Core 2.1, .NET Core 3.0, .NET 6 and .NET Standard 2.0 and 2.1.	Apache-2.0
JWT	10.1.1	JWT (JSON Web Token) implementation for .NET	MIT
Microsoft.AspNet.WebApi.Core	5.3.0	This package contains the core components to process HTTP requests using ASP.NET.	Apache-2.0
Microsoft.AspNetCore.Authentication.Certificate	8.0.10	ASP.NET Core middleware that enables an application to support certificate authentication.	MIT
Microsoft.AspNetCore.Authentication.JwtBearer	8.0.2/8.0.6	ASP.NET Core middleware that enables an application to receive an OpenID Connect bearer token.	MIT
Microsoft.AspNetCore.Identity.EntityFrameworkCore	8.0.2	ASP.NET Core Identity provider that uses Entity Framework Core.	MIT
Microsoft.AspNetCore.Mvc.NewtonsoftJson	8.0.2	ASP.NET Core MVC features that use Newtonsoft.Json for JSON processing.	MIT
Microsoft.AspNetCore.Mvc.ViewFeatures	2.2.0	ASP.NET Core MVC view rendering features.	Apache-2.0
Microsoft.Data.SqlClient	5.1.5/5.2.1	Microsoft.Data.SqlClient provides the data provider for SQL Server.	MIT
Microsoft.Extensions.Caching.Memory	8.0.1	In-memory cache implementation of Microsoft.Extensions.Caching.Memory.IMemoryCache.	MIT
Microsoft.Extensions.Configuration	8.0.0	Implementation of key-value pair based configuration for	MIT

		.NET Core.	
Microsoft.Extensions.Configuration.Abstractions	8.0.0	Abstractions of key-value pair based configuration.	MIT
Microsoft.Identity.Client	4.61.3	Microsoft Authentication Library (MSAL) for .NET enables developers to acquire tokens for calling protected APIs.	MIT
Microsoft.NET.Test.Sdk	17.8.0	The MSbuild targets and properties for building .NET test projects.	MIT
Moq	4.20.70	Mocking library for .NET.	BSD-3-Clause
Newtonsoft.Json	13.0.3	Json.NET is a popular high-performance JSON framework for .NET	MIT
NuGet.Common	6.9.1	Common utilities and interfaces for all NuGet libraries.	Apache-2.0
NuGet.Protocol	6.9.1	NuGet's protocol-level base functionality for interacting with feeds.	Apache-2.0
NUnit	3.13.3	NUnit is a unit-testing framework for all .NET languages.	MIT
NUnit.Analyzers	3.6.1	NUnit.Analyzers provides diagnostic analyzers for NUnit tests.	MIT
NUnit3TestAdapter	4.5.0	A test adapter for NUnit 3, compatible with Visual Studio, dotnet test, and other test runners.	MIT
Ocelot	24.0.0	An API Gateway built on .NET Core.	MIT
Portable.BouncyCastle	1.9.0	Portable version of BouncyCastle cryptographic library.	MIT
Serilog.AspNetCore	8.0.1	Serilog integration for ASP.NET Core.	Apache-2.0
Serilog.Enrichers.Environment	2.3.0	Enriches Serilog events with properties from System.Environment.	Apache-2.0
Serilog.Enrichers.Process	2.0.2	Enriches Serilog events with properties from the current Process.	Apache-2.0
Serilog.Enrichers.Thread	3.1.0	Enriches Serilog events with properties from the current Thread.	Apache-2.0
Serilog.Expressions	4.0.0	Expression-based event filtering for Serilog.	Apache-2.0
Serilog.Formatting.Compact	2.0.0	A compact JSON-based format for Serilog events.	Apache-2.0
Serilog.Settings.Configuration	8.0.0	Microsoft.Extensions.Configuration support for Serilog.	Apache-2.0
Serilog.Sinks.Async	1.5.0	Asynchronous sink wrapper for Serilog.	Apache-2.0

Serilog.Sinks.MSSqlServer	6.6.0	A Serilog sink that writes events to Microsoft SQL Server.	Apache-2.0
Swashbuckle.AspNetCore	6.4.0/6.5.0	Swagger tools for documenting APIs built on ASP.NET Core.	MIT
System.Configuration.ConfigurationManager	8.0.0	Provides types that support using configuration files.	MIT
System.Data.Common	4.3.0	Provides common ADO.NET classes for database access.	MIT
System.Data.SqlClient	4.8.6	Provides the data provider for SQL Server.	MIT
System.Formats.Asn1	8.0.1	Provides support for reading and writing ASN.1-encoded data.	MIT
System.IdentityModel.Tokens.Jwt	7.4.0	Includes types for creating, validating, and securely transmitting JSON Web Tokens.	MIT
System.Net.Http	4.3.4	Provides a programming interface for modern HTTP applications.	MIT
System.Runtime.Caching	8.0.1	Provides classes to use caching facilities.	MIT
System.Security.Cryptography.Pkcs	8.0.0	Provides support for PKCS and CMS algorithms.	MIT
System.Security.Cryptography.ProtectedData	8.0.0	Provides access to Windows Data Protection API.	MIT
System.Security.Cryptography.Xml	7.0.0	Provides classes to support the creation and validation of XML digital signatures.	MIT
System.Security.Permissions	8.0.0	Provides classes that control access to operations and resources based on policy.	MIT
System.Text.Encodings.Web	4.7.2	Provides types for encoding and escaping strings for use in JavaScript, HTML, and URLs.	MIT
System.Text.Json	9.0.2/9.0.8	Provides high-performance, low-allocating, and standards-compliant capabilities to process JavaScript Object Notation (JSON).	MIT
System.Text.RegularExpressions	4.3.1	Provides the System.Text.RegularExpressions.Regex class, an implementation of a regular expression engine.	MIT

AI/ML Toolkit Package List

Package Name	Version	Description	License Type
Flask-Cors	6.0.0	A Flask extension simplifying CORS support	MIT
SQLAlchemy	2.0.41	Database Abstraction Library	MIT
aif360	0.6.1	IBM AI Fairness 360	Apache 2.0
aiofiles	24.1.0	File support for asyncio.	Apache 2.0

alibi	0.9.6	Algorithms for monitoring and explaining machine learning models	Apache 2.0
arch	7.2.0	ARCH for Python	Illinois/NCSA
authlib	1.6.0	The ultimate Python library in building OAuth and OpenID Connect servers and clients.	BSD 3
autokeras	2.0.0	AutoML for deep learning	Apache 2.0
beautifulsoup4	4.13.4	Screen-scraping library	MIT
bleach	6.2.0	An easy safelist-based HTML-sanitizing tool.	Apache 2.0
blis	0.7.11	The Blis BLAS-like linear algebra library, as a self-contained C-extension.	BSD
bs4	0.0.2	Dummy package for Beautiful Soup (beautifulsoup4)	MIT
catboost	1.2.8	CatBoost Python Package	Apache 2.0
category_encoders	2.8.1	A package for encoding categorical variables for machine learning	BSD 3
chardet	5.2.0	Universal encoding detector for Python 3	LGPL 2.1
confluent-kafka	2.10.1	Confluent's Python client for Apache Kafka	Apache 2.0
contractions	0.1.73	Fixes contractions such as you're to you are	MIT
cython	>=3.0.6	The Cython compiler for writing C extensions in the Python language.	Apache 2.0
demoji	1.1.0	Accurately remove and replace emojis in text strings	Apache 2.0
docker	7.1.0	A Python library for the Docker Engine API.	Apache 2.0
dython	0.7.9	A set of data tools in Python	MIT
evidently	0.7.8	Open-source tools to analyze, monitor, and debug machine learning model in production.	Apache 2.0
fastapi	0.115.12	FastAPI framework, high performance, easy to learn, fast to code, ready for production	MIT
flask_restful	0.3.10	Simple framework for creating REST APIs	BSD
gpytorch	1.14	An implementation of Gaussian Processes in Pytorch	MIT
gunicorn	23.0.0	WSGI HTTP Server for UNIX	MIT
gym	0.23.0	Gym: A universal API for reinforcement learning environments	MIT
hdfs	2.7.3	HdfsCLI: API and command line interface for HDFS.	MIT
holidays	>=0.25,<1	Open World Holidays Framework	MIT
html2docx	1.6.0	Convert valid HTML input to docx.	MIT
httpx	0.28.1	The next generation HTTP client.	BSD
hyperopt	0.2.7	Distributed Asynchronous Hyperparameter Optimization	BSD
imbalanced-learn	0.13.0	Toolbox for imbalanced dataset in machine learning	MIT
influxdb	5.3.2	InfluxDB client	MIT

ipython	9.2.0	IPython: Productive Interactive Computing	BSD 3
jinja2	3.1.6	A very fast and expressive template engine.	BSD
joblib	1.5.1	Lightweight pipelining with Python functions	BSD 3
kaleido	0.2.1	Static image export for web-based visualization libraries with zero dependencies	MIT
keras-tuner	1.4.7	A Hyperparameter Tuning Library for Keras	Apache 2.0
kneed	0.8.5	Knee-point detection in Python	BSD 3
lightgbm	4.6.0	LightGBM Python-package	MIT
lightkube	0.17.1	Lightweight kubernetes client library	MIT
loguru	0.7.3	Python logging made (stupidly) simple	MIT
markdown	3.8.2	Python implementation of John Gruber's Markdown.	BSD 3
matplotlib	3.10.3	Python plotting package	Python 2.0
mlflow	3.1.1	MLflow is an open source platform for the complete machine learning lifecycle	Apache 2.0
natsort	8.4.0	Simple yet flexible natural sorting in Python.	MIT
nltk	3.9.1	Natural Language Toolkit	Apache 2.0
numexpr	2.11.0	Fast numerical expression evaluator for NumPy	MIT
numpy	1.26.0	Fundamental package for array computing in Python	BSD 3
onnx	1.18.0	Open Neural Network Exchange	Apache 2.0
onnxmltools	1.14.0	Converts Machine Learning models to ONNX	Apache 2.0
onnxruntime	1.22.0	ONNX Runtime is a runtime accelerator for Machine Learning models	MIT
openpyxl	3.1.5	A Python library to read/write Excel 2010 xlsx/xlsm files	MIT
optuna	4.4.0	A hyperparameter optimization framework	MIT
pandas	2.3.0	Powerful data structures for data analysis, time series, and statistics	BSD 3
passlib	1.7.4	comprehensive password hashing framework supporting over 30 schemes	BSD 3
pdfkit	1.0.0	Wkhtmltopdf python wrapper to convert html to pdf using the webkit rendering engine and qt	MIT
pdfplumber	0.11.7	Plumb a PDF for detailed information about each char, rectangle, and line.	MIT
plotly	>=5.24.1,<6	Plotly is a graphing and data visualization library for Python	MIT
pmdarima	2.0.4	Python's forecast::auto.arima equivalent	MIT
postgres	4.0	postgres is a high-value abstraction over psycopg2.	MIT
premailer	3.10.0	Turns CSS blocks into style attributes	Python 2.0
prophet	1.1.7	Automatic Forecasting Procedure	MIT
protobuf	5.29.5	No project description provided	BSD 3

psutil	7.0.0	Cross-platform lib for process and system monitoring in Python. NOTE: the syntax of this script MUST be kept compatible with Python 2.7.	BSD 3
psycopg2-binary	2.9.9	psycopg2 - Python-PostgreSQL Database Adapter	LGPL
pydantic	2.11.7	Data validation using Python type hints	MIT
pyicu	2.15.2	Python extension wrapping the ICU C++ API	MIT
pymysql	1.1.1	Pure Python MySQL Driver	MIT
pyodbc	5.2.0	DB API module for ODBC	MIT No Attribution
pyspark	3.5.5	Apache Spark Python API	Apache 2.0
pyspellchecker	0.8.2	Pure python spell checker based on work by Peter Norvig	MIT
pytest-asyncio	1.0.0	Pytest support for asyncio	Apache 2.0
pytest-cov	6.2.1	Pytest plugin for measuring coverage.	MIT
pytest-mock	3.14.1	Thin-wrapper around the mock package for easier use with pytest	MIT
pytest	8.4.1	pytest: simple powerful testing with Python	MIT
python-dotenv	1.1.1	Read key-value pairs from a .env file and set them as environment variables	BSD
python-keycloak	5.6.0	python-keycloak is a Python package providing access to the Keycloak API.	MIT
python-magic	0.4.27	File type identification using libmagic	MIT
python-multipart	0.0.20	A streaming multipart parser for Python	Apache 2.0
rank_bm25	0.2.2	Various BM25 algorithms for document ranking	Apache 2.0
redis	6.2.0	Python client for Redis database and key-value store	MIT
reportlab	4.4.2	The Reportlab Toolkit	BSD
requests	2.32.4	Python HTTP for Humans.	Apache 2.0
scikit-learn	1.6.1	A set of python modules for machine learning and data mining	BSD 3
scipy	1.15.3	Fundamental algorithms for scientific computing in Python	BSD
seaborn	0.13.2	Statistical data visualization	BSD
setuptools	78.1.1	Easily download, build, install, upgrade, and uninstall Python packages	MIT
shap	0.43.0	A unified approach to explain the output of any machine learning model.	MIT
skl2onnx	1.19.1	Convert scikit-learn models to ONNX	Apache 2.0
spacy	3.6.1	Industrial-strength Natural Language Processing (NLP) in Python	MIT
spark-nlp	6.0.3	John Snow Labs Spark NLP is a natural language processing library built on top of Apache Spark ML. It provides simple, performant & accurate NLP annotations for machine learning pipelines, that scale easily in a distributed environment.	Apache 2.0
sshtunnel	0.4.0		

statsmodels	0.14.4	Statistical computations and models for Python	BSD
streamlit	1.45.1	A faster way to build and share data apps	Apache 2.0
tabulate	0.9.0	Pretty-print tabular data	MIT
tensorflow	2.18.1	TensorFlow is an open source machine learning framework for everyone.	Apache 2.0
textblob	0.19.0	Simple, Pythonic text processing. Sentiment analysis, part-of-speech tagging, noun phrase parsing, and more.	MIT
tf-agents	0.16.0	TF-Agents: A Reinforcement Learning Library for TensorFlow	Apache 2.0
thinc	8.1.12	A refreshing functional take on deep learning, compatible with your favorite libraries	MIT
uq360	0.1.1	IBM Uncertainty Quantification 360	Apache 2.0
uvicorn[standard]	0.34.3	The lightning-fast ASGI server.	BSD
weasyprint	62.3	The Awesome Document Factory	BSD
wheel	0.46.1	Command line tool for manipulating wheel files	MIT
word2number	1.1	Convert number words eg. three hundred and forty two to numbers (342).	MIT
wordcloud	1.9.4	A little word cloud generator	MIT
xgboost	3.0.2	XGBoost Python Package	Apache 2.0
xhtml2pdf	0.2.17	PDF generator using HTML and CSS	Apache 2.0
pyarrow	16.1.0	Python library for Apache Arrow	Apache 2.0

Gen AI Component Package List

Package Name	Version	Description	License Type
@aws-sdk/client-ec2	3.910.0	AWS SDK for JavaScript (v3) client for Amazon EC2.	Apache-2.0
@azure/arm-compute	22.4.0	Azure ComputeManagement client library for JavaScript/TypeScript.	MIT
@azure/identity	4.13.0	Azure Identity library for Microsoft Entra ID token-based authentication.	MIT
@google-cloud/translate	9.2.1	Node.js client for the Google Cloud Translation API.	Apache-2.0
@ibm-cloud/cloudant	0.12.10	IBM Cloudant Node.js SDK for interacting with your Cloudant database.	Apache-2.0
@ibm-functions/iam-token-manager	1.0.3	Helper utilities for managing IBM Cloud IAM tokens.	Apache-2.0
@node-saml/passport-saml	5.1.0	SAML 2.0 authentication provider for Passport, the Node.js authentication library.	MIT
@socket.io/redis-adapter	8.3.0	A Redis-based adapter for Socket.IO to scale across multiple Node.js instances.	MIT
@zilliz/milvus2-sdk-	2.6.1	Node.js SDK for Zilliz Milvus, a vector database management system.	Apache-2.0

node			
adaptive-expressions	4.22.1	Common expression language library for evaluating conditions in conversational AI systems.	MIT
adaptivecards	1.2.3,2.11.3	JavaScript library for rendering Adaptive Cards in HTML clients.	MIT
adaptivecards-templating	2.3.1	Adaptive Card data binding and templating engine for JavaScript.	MIT
async	0.9.2,2.6.4,3.2.6	Utility module providing straight-forward, powerful functions for working with asynchronous JavaScript.	MIT
aws-sdk	2.1692.0	Amazon Web Services SDK for JavaScript (v2, now in maintenance mode).	Apache-2.0
axios	1.12.0,1.12.2	Promise-based HTTP client for the browser and Node.js.	MIT
bcrypt	5.1.1	A library for hashing passwords using the bcrypt algorithm.	MIT
botbuilder	4.23.3	Core library for building conversational AI experiences with the Microsoft Bot Framework SDK.	MIT
botframework-connector	4.23.3	Client library for accessing the Bot Connector and Bot State REST APIs.	MIT
busboy	1.6.0	A node.js module for parsing incoming HTML form data.	MIT
compression	1.8.1	Node.js compression middleware for Express and Connect.	MIT
connect-flash	0.1.1	Flash message middleware for Connect/Express that stores messages in the session.	MIT
connect-redis	6.1.3	Redis session store for Connect and Express.	MIT
cookie-parser	1.4.7	HTTP cookie parsing middleware for Express.	MIT
deepmerge	3.3.0	A library for deeply merging the properties of two or more objects.	MIT
eld	1.0.1	A minimalist JavaScript utility library with functions for array and object manipulation. (Based on general utility name)	MIT
email-signature-detector	0.0.6	Detects and removes email signatures from email body content.	MIT
exceljs	4.4.0	Read, write, and manipulate XLSX/XLSB/CSV/OXML files.	MIT
expect-ct	0.1.1	A middleware to set the Expect-CT HTTP header for Content-Security-Policy.	MIT
express	4.21.2,5.1.0	Fast, unopinionated, minimalist web framework for Node.js.	MIT
express-handlebars	6.0.7	A Handlebars view engine for Express.	MIT
express-session	1.18.1	Simple session middleware for Express.	MIT
extract-zip	2.0.1	A Node.js module for extracting zip files.	MIT
form-data	2.5.5,4.0.4	A module for creating readable multipart/form-data streams.	MIT
generate-password	1.7.1	Generates secure and memorable random passwords.	MIT

geoip-country	4.2.247	Geolocation lookups for Node.js using MaxMind GeoLite2 data.	MIT
googleapis	114.0.0	Google APIs client library for Node.js.	Apache-2.0
ibm-cloud-sdk-core	5.4.3	Core library for all IBM Cloud Node.js SDKs.	Apache-2.0
ibm-cos-sdk	1.13.4,1.14.1	Node.js SDK for IBM Cloud Object Storage.	Apache-2.0
ibm-watson	10.0.0	IBM Watson Node.js SDK (superseded by per-service SDKs).	Apache-2.0
ibmcloud-appid	7.0.1	Node.js SDK for IBM Cloud App ID, an authentication service.	Apache-2.0
joi	17.13.3	A powerful schema description language and data validator for JavaScript.	BSD-3-Clause
json2csv	4.5.1	Converts JSON to CSV format.	MIT
jsontoxml	1.0.1	Converts JSON objects to XML format.	MIT
jsonwebtoken	9.0.0,9.0.2	An implementation of JSON Web Tokens for Node.js.	MIT
lusca	1.6.1	Security middleware for Express applications.	MIT
mammoth	1.11.0,1.9.0	Convert .docx documents to HTML.	BSD-2-Clause
markdown-it	12.3.2	Markdown parser implemented in JavaScript.	MIT
mime-types	2.1.35,3.0.1	A comprehensive library for getting MIME types from file extensions.	MIT
mobile-detect	1.4.3	A lightweight JavaScript library for detecting mobile devices.	MIT
module-alias	2.2.3	Creates aliases to require paths, enabling cleaner code structure.	MIT
moment	2.29.4,2.30.1	Parse, validate, manipulate, and display dates and times in JavaScript (now a legacy project).	MIT
mongodb	5.9.2,6.20.0	Official MongoDB Node.js driver.	Apache-2.0
morgan	1.10.1	HTTP request logger middleware for Node.js.	MIT
mssql	11.0.1	Microsoft SQL Server client for Node.js.	MIT
multer	2.0.2	Middleware for handling multipart/form-data, primarily for file uploads.	MIT
nocache	2.1.0,3.0.4	Middleware to set Cache-Control and related headers to prevent client-side caching.	MIT
node-wordnet	0.1.12	Access WordNet from Node.js.	MIT
nodemailer	7.0.9	A module for sending e-mails from Node.js applications.	LGPL-3.0-only
passport	0.6.0,0.7.0	Simple, unobtrusive authentication middleware for Node.js.	MIT
password-validator	4.1.1	A simple library to validate passwords against a list of rules.	MIT
pdf-parse	1.1.1	A module to extract text content from PDF files.	MIT
pg	8.16.3	A pure JavaScript PostgreSQL client for Node.js.	MIT
polly-tts	1.0.4	A Node.js module for Amazon Polly Text-to-Speech synthesis.	MIT
qrcode	1.5.4	Generates QR codes in various formats (canvas, SVG, terminal).	MIT

qs	6.13.0,6.14.0,6.5.3	A querystring parsing and stringifying library.	BSD-3-Clause
recursive-readdir	2.2.3	Recursively read a directory's contents.	MIT
redis	3.1.2	Node.js client for Redis.	MIT
slackify-html	1.0.1	Converts HTML to Slack-compatible message formatting.	MIT
slackify-markdown	4.5.0	Converts Markdown to Slack-compatible message formatting.	MIT
socket.io	4.8.1	Real-time bidirectional event-based communication library.	MIT
socket.io-client		The client-side library for Socket.IO.	MIT
speakeasy	2.0.0	Easy-to-use library for generating and validating TOTP (Time-based One-Time Password) tokens.	MIT
striptags	3.2.0	A Node.js module for stripping HTML tags from strings.	MIT
svg-captcha	1.4.0	Generates customizable SVG CAPTCHAs.	MIT
tesseract.js	6.0.1	Pure JavaScript OCR (Optical Character Recognition) using Tesseract.	Apache-2.0
twilio	4.21.0,5.10.3	The official Node.js helper library for the Twilio API.	MIT
uuid	10.0.0,11.1.0,3.4.0,8.0.0,8.3.2,9.0.1	A simple and fast library for generating UUIDs (Universally Unique Identifiers).	MIT
web-push	3.6.7	A library for sending push notifications using the Web Push Protocol.	MIT
wndb-with-exceptions	3.0.2	WordNet database files including exception rules.	MIT

6.3. AppScan Security Reports

6.3.1. SAST Report - Web Apps

No security vulnerabilities were found in the SAST Report, as detailed in the table below.

AppScan SAST WebApps	
■ Critical	0
■ High	0
■ Medium	0
■ Low	0

■ Informational	0
Total	0

6.3.2. SAST Report - Web API

No security vulnerabilities were found in the SAST Report, as detailed in the table below.

AppScan SAST WebAPI	
■ Critical	0
■ High	0
■ Medium	0
■ Low	0
■ Informational	0
Total	0

6.3.3. SAST Report - Integration module

No security vulnerabilities were found in the SAST Report, as detailed in the table below.

AppScan SAST Integration	
■ Critical	0
■ High	0
■ Medium	0
■ Low	0
■ Informational	0

Total	0
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6.3.4. SAST Report - AI/ML Toolkit

No critical, high vulnerabilities were found in the SAST Report.

AppScan SAST AI/ML Toolkit	
■ Critical	0
■ High	0
■ Medium	2
■ Low	0
■ Informational	0
Total	0

6.3.5. SAST Report -Gen-AI Component

No vulnerabilities were found in the SAST Report.

AppScan SAST Gen AI Component	
■ Critical	0
■ High	0
■ Medium	0
■ Low	0
■ Informational	0
Total	0

6.3.6. DAST Report

The DAST report shows no critical, high, security vulnerabilities.

AppScan DAST	
■ Critical	0
■ High	0
■ Medium	1
■ Low	0
■ Informational	0
Total	1

6.3.7. SCA Security Report – WebApps

No security vulnerabilities were found in the SCA Security Report, as detailed in the table below.

AppScan SCA Security Report Web Apps	
■ Critical	0
■ High	0
■ Medium	0
■ Low	0
Total	0

6.3.8. SCA Security Report – WebAPI

No security vulnerabilities were found in the SCA Security Report, as detailed in the table below.

AppScan SCA Security Report Web API	
■ Critical	0
■ High	0
■ Medium	0
■ Low	0
Total	0

6.3.9. SCA Security Report – Integration

No security vulnerabilities were found in the SCA Security Report, as detailed in the table below.

AppScan SCA Security Report Integration	
■ Critical	0
■ High	0
■ Medium	0
■ Low	0
Total	0

6.3.10. SCA Security Report – AI/ML Toolkit

No critical, high vulnerabilities were found in the SCA Security Report, as detailed in the table below.

AppScan SCA Security Report AI/ML Toolkit	
■ Critical	0

■ High	0
■ Medium	2
■ Low	0
Total	2

6.3.11. SCA Security Report – Gen-AI

No security vulnerabilities were found in the SCA Security Report, as detailed in the table below..

AppScan SCA Security Report Gen-AI Component	
■ Critical	0
■ High	0
■ Medium	0
■ Low	0
Total	0

6.4. Security Penetration Testing Reports

For Current release HCLSW Security Team conducted Penetration Testing for all the components of HCL MyXalytics based on OWASP Top 10 guideline for Web and Gen AI.

All security vulnerabilities were remediated and validated before the release by the HCLSW Security team with no Critical or High vulnerabilities remaining, as detailed in the table below.

6.4.1. Penetration Testing Internal

No vulnerabilities were found in the HCLsoftware security pen testing, as detailed in the table below.

Pen Testing Report Internal	
■ Critical	0
■ High	0
■ Medium	0
■ Low	0
Total	0

6.4.2. Penetration Testing External

No critical, high, medium vulnerabilities were found in the external penetration testing, as detailed in the table below.

Pen Testing Report External	
■ Critical	0
■ High	0
■ Medium	0
■ Low	3
Total	0

6.4.3. PSIRT Details

As part of HCL Software Product Security Incident Response (PSIRT) process , for current release following PSIRT records were created for security issues. Following is the description of PSIRT IDs:

Issue id	Source	Description
PRB0157462 (Medium Severity)	AppScan	(CWE-16) - Medium- Root file system not mounted as read-only.
PRB0157457 (Medium Severity)	AppScan	(CWE-78) - Medium- Potential command injection vulnerability via os.system.
PRB0153346 (Medium Severity)	AppScan	(CWE-1032) - Medium - Unsafe fallbacks for inline scripts allowed in CSP.
PRB0158067 (Low Severity)	Pen Testing- External	(CVE-2025-52651) - Improper Input Validation.
PRB0158068 (Low Severity)	Pen Testing- External	(CVE-2025-52652): Content Spoofing.
PRB0158079 (Low Severity)	Pen Testing- External	(CVE-2025-52657): Potential DOS.
PRB0160134 (Medium Severity)	MEND (formerly White source)	(CVE-2025-54121): starlette-0.46.2-py3-none-any.whl
PRB0160136 (Medium Severity)	MEND (formerly White source)	(CVE-2025-50817): future-1.0.0-py3-none-any.whl

7. Checklists

7.1. Data Security Checklist

Questions Response	
Is the application compliant with HCLTech's data classification and data privacy policies and procedures?	Yes

<p>List the type and nature of data that will be stored and processed by this application.</p> <p>a. Does the application support data masking, pseudonymization and anonymization techniques?</p> <p>b. Are data downloads/transfers to unmanaged devices, removable storage or personal devices restricted based on user roles?</p>	<p>Type of data:</p> <ol style="list-style-type: none"> 1.Integrations data based on the customer environment (ITSM, System Performance,Network Performance etc) 2.User Id 3 User Name <p>Nature of Data:</p> <ol style="list-style-type: none"> 1. Project Data 2. Customer Data <p>a. Anonymization is supported</p> <p>b. Application will be hosted on client specific environment and accordingly restrictions are being managed through customer network and policies.</p>
<p>Are all security policies, procedures and guidelines implemented and updated to protect CIA (Confidentiality, Integrity, and Availability)?</p>	<p>Client specific security policies, procedures and guidelines can be incorporated as product is hosted in the customer environment.</p>
<p>What is the retention of the data created/used by AI (0-1 years; 1-3 years; 3-5 years; 5+ years)?</p>	<p>Data retention period is configurable and can be implemented as per delivery/customer ask with the help of PS team.</p>

7.2. Authentication and Access Control Checklist

Questions Response	
<p>List the authentication mechanism implemented in the application.</p> <p>a. Does HCL MyXalytics support SSO and MFA with Microsoft/Azure AD/Active Directory?</p> <p>b. Does HCL MyXalytics support IAM solutions for user management?</p> <p>c. Describe process to manage/monitor access for users/admins at tenant level.</p> <p>d. Describe the process for user reconciliation in the application.</p>	<p>a. The application supports form-based authentication ,LDAP , SSO. application supports ADFS, Ping Identity and OKTA.</p> <p>b. Application has its own mechanism to support IAM</p> <p>c. Application has its own RBAC mechanism to manage users/admin at tenant level.</p> <p>d. Application onboards and deboards the users as per the user management process defined in customers environment.</p>
<p>Application Access Methods:</p> <p>a. Can the application be accessed over the web (internet)? Describe login security measures. b. Is access available via the HCL intranet or VPN? c. Is any type of device binding implemented? d. Is there a mobile application?</p>	<p>a. Yes.</p> <p>b. Yes</p> <p>c. Not Applicable</p> <p>d. Not Applicable</p>
<p>Access to Data Storage - There should be no direct access to confidential/sensitive data from the backend for unauthorized users.</p>	<p>a) All the sensitive information is kept encrypted.</p> <p>b) Access to database is only available to DBAs and PS admins</p>
<p>Encryption of data in transit and data at rest should comply with best security and industry standards such as NIST, ISO27001. E.g., SSL / TLS 1.3 above for data in transit; AES-256 bit for data at rest.</p>	<p>SSL certificates are used to encrypt data in transit. (TLS 1.3 is used). Data at rest is stored in a database and secured through encrypt decrypt mechanisms using the AES-256-GCM algorithm.</p>

7.3. Application Security Checklist

Control	Description
Data at rest and in transit encryption	<ul style="list-style-type: none">• SSL certificates are used to encrypt data in transit. (TLS 1.3 is used).• Data at rest is secured through encrypt decrypt mechanisms. Application using the AES-256-GCM algorithm for encryption-decryption.
Authentication & Authorization	<ul style="list-style-type: none">• The application provides comprehensive authentication support through form-based login, LDAP integration, and Single Sign-On (SSO) capabilities. It seamlessly integrates with enterprise identity providers including ADFS, Ping Identity, and Okta.• Application has its own RBAC mechanism to manage users/admin at tenant level
Content Filtering & Prompt Validation (using Azure and GCP native content filtering service)	<ul style="list-style-type: none">• Real-Time Content Filtering: Built-in content moderation checks for toxic, harmful, or restricted content using classifiers and guardrails before generating output.• Prompt Injection Protection: Input sanitization and pattern recognition techniques are used to detect and neutralize prompt injection attempts.• Output Filtering: Sensitive terms, data leakage, or prohibited topics are blocked before reaching the user.

7.4. Non-Functional Testing Coverage Details

7.4.1. Load Testing

Objective:

Evaluate HCL MyXalytics performance on concurrent and simultaneous user requests under both normal and peak load conditions.

Procedure:

Load tests were conducted by simulating concurrent and simultaneous user requests with varying ramp-up time. The test scenarios were selected to cover a broad range of system functions, including login, search, data retrieval, batch processing use cases, and result status checks.

For each scenario, key performance metrics such as error/failure rate (e.g., 0% or >0%) and average response time were recorded to identify potential bottlenecks and capacity limits.

Outcome:

Note:

Concurrent users – All users start sending requests at the same time.

Simultaneous users – A predefined ramp-up time is used to reach the target number of users gradually.

Module	Results
AIOPS Summary	• 250 simultaneous users → 1.616 sec average response time
CXO_DigitalCockpit	• 250 simultaneous users → 1.964 sec average response time
CXO_ExecutiveSummary	• 250 simultaneous users → 2.913 sec average response time
CXO_TrustedAdvisory	• 250 simultaneous users → 5.572 sec average response time

CXO_Value	<ul style="list-style-type: none"> • 250 simultaneous users → 4.532 sec average response time
ExecutiveDashboard	<ul style="list-style-type: none"> • 250 simultaneous users → 1.489 sec average response time
Sign-Up to the Application	<ul style="list-style-type: none"> • 250 simultaneous users → 687.7 mili sec average response time
Super Admin Approval for User and Login.	<ul style="list-style-type: none"> • 250 simultaneous users → 2.192 sec average response time
Login	<ul style="list-style-type: none"> • 250 simultaneous users → 1.348 sec average response time
Home dashboards.	<ul style="list-style-type: none"> • 250 simultaneous users → 1.712 sec average response time

Home Dashboard-widget.	• 250 simultaneous users → 2.701 sec average response time
CostAnalysisSummary	• 250 simultaneous users → 4.682 sec average response time
Cost Analysis_SpendAnalysis-Widg-ets	• 250 simultaneous users → 1.882 sec average response time
Cost Optimization_Summary-Widgtes.	• 250 simultaneous users → 1.068 sec average response time
Cost Optimization AWS Saving Plan Recommendation-Widgets.	• 250 simultaneous users → 5.827 sec average response time
CloudGovernance_AWSInventory-Widgtes	• 250 simultaneous users → 1.733 sec average response time
CloudGovernance_GCPDisks-Widgets	• 250 simultaneous users → 1.740 sec average response time

CloudGovernance_AzureSecurity&Compliance_SecurityCenter-Summary	• 250 simultaneous users → 1.947 sec average response time
Cost Optimization-Application_Summary-Widgtes	• 250 simultaneous users → 3.99 sec average response time
Cost Optimization-Applictiaion_Right Sizing-Widgets	• 250 simultaneous users → 1.994 sec average response time
Cost Optimization Settings(Right Sizing Volume)	• 250 simultaneous users → 1.696 sec average response time
Geo Health	• 250 simultaneous users → 4.214 sec average response time
Practitioner Advisory - user	• 250 simultaneous users → 1.959 sec average response time
Verify Alert Rule Page	• 250 simultaneous users → 1.572 sec average response time

Verify Alert Dashboard	<ul style="list-style-type: none"> • 250 simultaneous users → 5.485 sec average response time
Add Tag Values	<ul style="list-style-type: none"> • 250 simultaneous users → 4.792 sec average response time
Verify Define Tag Policy Configuration	<ul style="list-style-type: none"> • 250 simultaneous users → 6.093 sec average response time
Verify Define Virtual Tag	<ul style="list-style-type: none"> • 250 simultaneous users → 2.225 sec average response time
Saving Plan	<ul style="list-style-type: none"> • 250 simultaneous users → 1.382 sec average response time
Cache Manager Console	<ul style="list-style-type: none"> • 250 simultaneous users → 1.694 sec average response time

7.4.2. Upgradability testing

Objective:

Ensure that the HCL MyXalytics upgrade process completes successfully without any loss of user data.

Procedure:

- Perform an upgrade of HCL MyXalytics from version 6.6 to 6.7
- Verify that all user data, including settings and configurations, remains intact.

Outcome:

After upgrading from v6.6 to v6.7, all previously uploaded data, settings, and executed use cases were successfully retained in the updated version.

8. Existing Issues

The v6.7 release of HCL MyXalytics has the following issues categorized by severity:

- Critical Severity: 0 Issues
- High Severity: 0 Issues
- Medium Severity: 0 Issues
- Low Severity: 2 Issues

Issue ID	Issue Description
17104	Submenus appear overlapped and misaligned when the hamburger menu icon is clicked.
	<i>RCA: The issue occurred due to incorrect CSS positioning or z-index handling of submenu elements, causing overlap and misalignment when the hamburger menu was clicked.</i>
17105	On the Cost Optimization page, when clicking the hamburger icon, a square box appears before the “Back to Dashboard” menu text, which is incorrect.
	<i>RCA: The issue occurred due to an incorrect or missing icon reference in the menu label, causing a placeholder (square box) to appear before the “Back to Dashboard” text.</i>

9. Looking Forward

HCL MyXalytics version 6.7 lays foundation for on-boarding new Persona's across different domains into the product and sets the bedrock for building new integrations for bringing data insights closer to the user for better decision making. Looking ahead our focus would be on:

Integration : Integrations with Digital workplace, Compute storage, middleware monitoring tools.

Visualization : New visualizations for better data analysis and interaction with data.

Workload Estimator: Cloud workload estimator module for estimating cost for choosing cost effective cloud service.

Custom cloud compliance: Ability to create custom compliance standards as per organizational needs.

Finops Cost recommendations: Expanded FinOps Cost Recommendations to include additional cost optimization services, enabling broader coverage and uncovering new opportunities for cloud cost savings.

Discounted Pricing–Based Recommendations: Upcoming capability to calculate cost-saving opportunities using discounted prices, offering users a more accurate view of potential savings.

OCI Integration Expansion: Future release will enable deeper integration with OCI Monitoring, Security, and Compliance modules, enhancing observability, compliance tracking, and risk management within OCI environments.

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