Checkmarx CxSAST v8.1.0
Release Notes

May, 2016

8.1.0 Release Updates

CxSAST 8.1.0 includes the following updates:
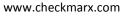
New Features and Changes
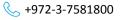
Application

Category	Features
Projects & Scans	A new tab (OSA) has been added to the Edit Project panel (**Projects & Scans > Projects > OSA**). This tab provides the option to define the location path for the project's open source libraries in order for CxSAST to initiate the analysis. This is similar to the Shared folder on the location tab for creating and configuring CxSAST projects.
Project State Summary	A new Project State Summary screen has been added to this version of CxSAST (**Dashboard > Project State > Project Name**). The Project State Summary screen provides additional information about the status of the project. You are provided with the option to perform a full SAST scan, an Incremental scan as well as additional actions (i.e. edit project, open scan summary and open viewer).
Project State Summary	The new Project State Summary screen displays the SAST Vulnerabilities Status and SAST Vulnerabilities Progress Status. This provides a set of graphs with the status of each vulnerability severity as well as the progress status of each vulnerability severity.
Project State Summary	The new Project State Summary screen displays the Open Source Analysis (OSA) Status. This provides analysis results for predefined open source libraries associated with this project. You can also perform a new Open Source Analysis by clicking Run OSA. A process indicator is displayed and you can view the analysis results upon completion.
Project State Summary	To accompany the new Open Source Analysis feature, an additional report has been added to CxSAST. Once the analysis is complete, you can view the analysis results by clicking the View Analysis Results link or by opening the OSA tab. The Open Source Analysis report displays all the results of the last analysis. This report can also be generated to PDF format.

Category	Features
Project State Summary	In cases where the Open Source Analysis license has not yet been enabled for CxSAST, an "OSA license is not enabled" message is displayed. For those who are interested in the new Open Source Analysis feature a linked option to view a sample of a generated Open Source Analysis report is available. Once open, this report also contains a link to the Open Source Analysis web page (https://www.checkmarx.com/Open-Source-Analysis) on the Checkmarx website.
Project State Summary	The Open Source Analysis report can also be generated to PDF format by clicking the Download PDF button. It is highly recommended that you generate the PDF version straight after creating the Open Source Analysis report in order to ensure accuracy and consistency.
Management	A new status indicator (OSA License) has been added to the General panel in the License Details screen (**Management > Application Settings > License Information**). This indicator specifies the status of the Open Source Analysis license. Open Source Analysis license status can be enabled, disabled or conditional with expiration date.
Management	LDAP Server registration and authentication now supports paged results. This allows the requested search results to be split into pages of a specified size, instead of all the data in one block. This is useful in situations when potentially large result sets are expected. When paged results is enabled (default), the definition of a user search can now be specific to that user (i.e. using Full User DN).
Management	The LDAP Server Configuration fields "Additional User DN" and "Additional Group DN" are no longer mandatory. This allows LDAP users and groups to be assembled under the "Base DN".
Management	New functionality has been applied to the LDAP User Configuration fields "User First Name", "User Last Name" and "User Email". If any of these values are not filled, the default values are used when an LDAP user is created, e.g. User First Name: DavidK, User Last Name: DavidK, User Email: DavidK@org.
FIPS Support	CxSAST now supports Federal Information Processing Standards (FIPS) to conform to US Government Institutions that require FIPS compliance. CxServer and CxEngine components can now be installed and operated on a Windows FIPS Compliant hosts. CxSAST plugins are expected to be supported in an upcoming version.

Category	Features
Dashboard	A new visual indicator has been added to the CxSAST System Dashboard and is positioned underneath the Checkmarx logo/version. This indicator specifies the expiry date of the current CxSAST license. The indicator appears 90 days (defined in the DB) before the actual license expiry date and an email notification is automatically sent to the CxSAST System Administrator.
Dashboard	A navigation link has been added to the Dashboard screen in this version of CxSAST (**Dashboard > Project State > Project Name**). This link provides direct access to the new Project State Summary screen. An additional navigation link displayed on the Dashboard Risk panel also takes you to the new Project State Summary screen. Projects that have not yet had scans performed on them are now displayed in the Project State window with the "No SAST Scans performed" message.

Integration & Plugins

Category	Features
Integration - Jenkins	CxSAST now supports the option to run Open Source Analysis from Jenkins. Configuration is performed from within Jenkins (**Job > Configure > Build > Add build step > Execute Checkmarx Scan > Open Source Analysis > Includes / Excludes**) and the results can be viewed in Jenkins as well as the Open Source Analysis in the Project State screen.
Integration - Jenkins	In this new version of CxSAST .war and .ear files are now excluded (by default) from all vulnerability scans originating from Jenkins.
Perforce - Integration	Perforce integration improvements include smoother deployment process for customers using Perforce as source repository.
Integration - TFS	TFS plugin for CxSAST (v7.1.8) has been approved and now supports Team Foundation Server 2015 repository and build manager.

Engine

Category	Features
CxSAST Utilities	Due to file extension configuration being located in the DB rather that in a configuration file, a new File Extension Script Generator tool has been developed and added to the Checkmarx Utilities library. This tool can be used to convert ExtensionsConfig.xml files to executable scripts. These scripts can then be executed in Microsoft SQL Server Management Studio in order to synchronize and update the file extension tables in older versions of CxSAST.
Supported Code Languages and Frameworks	Added support in the CxEngine for scanning of Hapi.JS. This provides the ability to scan JavaScript projects that use the Hapi.JS framework and therefore providing more accurate results.

Resolved Issues

Category	Resolved Issues
Application	Improvements and fixes for Java queries
Application	Improvements in the CxSAST upgrade process
Application	Synchronization improvements between Application and CxEngine
CxEclipse Plugin	Adjusted height and width of Login dialog in CxEclipse plugin
Jenkins Integration	Improved scheduler and fixed periodic scanning issue in Jenkins plugin
GitHub integration	Improvements and fixes for GitHub integration
Engine	Improvements and fixes for the following languages: • Apex • Java • PL/SQL • JavaScript • PHP • ObjectiveC • C# • CCP • Ruby • VbNet

Known Limitations

Category	Known Limitations
Languages	There is currently no translation for languages other than English for the Open Source Analysis report (web and PDF versions) in the Project State screen. Full translation is planned in future CxSAST versions.
Localization	Due to Open Source Analysis being performed via WhiteSource, there is currently no localization of OSA reports. All date/time information in OSA is provided by the locale of the CxSAST Server and not the CxSAST Client.
Open Source Analysis	Open Source Analysis requests initiated manually from the User Interface will continue as intended, even if the user navigates to a different page or closes the browser. However, upon returning to the Project State Summary screen there will be no indication of the analysis process. In this case, the Open Source Analysis results will only become available for viewing upon completion of the analysis process.
Open Source Analysis	Open Source Analysis request takes longer than 30 minutes will be automatically timed out.