

Security Dashboard - Transaction Investigation

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Transaction Investigation view



Accessible from the sidebar menu or by clicking an object in the **Top Riskiest Transactions** tile, this view enables investigation of the transactions in the Application. Data is presented in a series of **tables** on the left and right hand side of the page enabling you to drill down from a **Transaction** with a high level of risk (i.e. Violations) right down to the **Violations themselves**.

Transactions Filter in loaded list

SECURITY as business risk driver

TRANSACTION NAME	RISK LEVEL
C:\CAST\Demo_lo ... a/challenge/6/PORT/PUT/challenge/6/	■
C:\CAST\Demo_lo ... ge/PORT/PUT/SqlInjection/challenge/	■
C:\CAST\Demo_lo ... 5b/PORT/POST/SqlInjection/attack5b/	■

Health Measures

HEALTH MEASURE
Security

The view functions in a very similar way to the [Risk Investigation view](#). The default **Health Measure** used for this view is **Security**.

The view lists **50 Transactions per "page"** sorted by the **risk level** (i.e. the **Transaction Risk Index (TRI) value**: TRI is an indicator of the riskiest transactions of the application. The TRI number reflects the cumulative risk of the transaction based on the risk in the individual objects contributing to the transaction. The TRI is calculated as a function of the rules violated, their weight/criticality, and the frequency of the violation across all objects in the path of the transaction. TRI is a powerful metric to identify, prioritize and ultimately remediate riskiest transactions and their objects.)

Selecting a transaction will display information in the right hand panel about the status of each Health Measure:

Health Measures

HEALTH MEASURE
Security

Column	Explanation
	Displays the number of Violations or Critical Violations added to the current snapshot for the currently selected item since the last snapshot.
	Displays the number of Violations or Critical Violations removed from the current snapshot for the currently selected item since the last snapshot.
#Critical / #Violations	Displays the number of Violations or Critical Violations for the currently selected item. This column is also used as the default sorting criteria when items are first displayed.
Health Measure	Name of the Health Measure/Business Criterion

Selecting a **Business Criteria** in this table will display all of the contributing **Technical Criteria** in the **right hand** section:

Health Measures

+			HEALTH MEASURE
+ 160	0	160	Security

Security
Security is focusing on design flaws, likelihood of having application failures and application defects due to modifications.

Technical Criteria

+			TECHNICAL CRITERION	
n/a	n/a	n/a	All Rules...	n/a
+ 55	0	55	Programming Practices - Error and Exception Handling	10
+ 52	0	52	Efficiency - Memory, Network and Disk Space Management	5
+ 23	0	23	Secure Coding - Input Validation	10
+ 19	0	19	Architecture - Multi-Layers and Data Access	8
+ 8	0	8	Secure Coding - Encapsulation	5
+ 3	0	3	Programming Practices - Unexpected Behavior	10

Column	Explanation
	Displays the number of Violations or Critical Violations added to the current snapshot for the currently selected item since the last snapshot.
	Displays the number of Violations or Critical Violations removed from the current snapshot for the currently selected item since the last snapshot.
#Critical / #Violations	Displays the number of Violations or Critical Violations for the currently selected item. This column is also used as the default sorting criteria when items are first displayed.
Technical Criterion	Name of the Technical Criterion.
Weight	Displays the weight of the Technical Criterion in its parent Health Measure/Business Criterion. The higher the value, the more weight the item carries.

Selecting a **Technical Criteria** will move the Technical Criteria to the left hand side of the page and display all of the contributing Rules, Distributions and Measures in the **right hand** section:

Technical Criteria

+			TECHNICAL CRITERION	
n/a	n/a	n/a	All Rules...	n/a
+ 44	0	44	Documentation - Automated Documentation	6
+ 15	0	15	Documentation - Volume of Comments	11
+ 10	0	10	Programming Practices - Modularity and OO Encapsulation Conformity	8
+ 4	0	4	Efficiency - Memory, Network and Disk Space Management	20

Rules...

+			NAME		
+ 6	0	6	Provide accessors to Private Fields	4	
+ 2	0	2	Avoid Classes with a High Lack of Cohesion - variant	7	
+ 2	0	2	Avoid Classes with a High Lack of Cohesion	7	

Column	Explanation
	Displays the number of Violations or Critical Violations added to the current snapshot for the currently selected item since the last snapshot.
	Displays the number of Violations or Critical Violations removed from the current snapshot for the currently selected item since the last snapshot.
#Critical / #Violations	Displays the number of Violations or Critical Violations for the currently selected item. This column is also used as the default sorting criteria when items are first displayed.
Names	Name of the Rule/Distribution/Measure.
Weight	Displays the weight of the Rule/Distribution/Measure in its parent Technical Criterion. The higher the value, the more weight the item carries.
Critical Rule	A red dot in this column indicates that the Rule has been set as critical in the Assessment Model.

Selecting a contributing Rule, Distribution or Measure will move the item to the left hand side of the page and display details about it (including the list of objects in violation and rule/distribution/measure documentation) in the **right hand** section:

Rules...

+	-	80	NAME	!
+7	-8	80	Avoid Methods with a very low comment/code ratio	3
0	0	5	Avoid Classes with a very low comment/code ratio	3

Violations

<input type="checkbox"/>	OBJECT NAME	LOCATION	RISK
<input type="checkbox"/>	com.salesmanager.core.entity.merchant.MerchantStore		
<input type="checkbox"/>	com.salesmanager.core.entity.payment.MerchantPaymentGatewayTrx		
<input type="checkbox"/>	com.salesmanager.core.entity.merchant.MerchantConfiguration		
<input type="checkbox"/>	com.salesmanager.core.entity.orders.OrderProductAttribute		
<input type="checkbox"/>	com.salesmanager.core.entity.reference.CoreModuleService		

Rule documentation

Maintainability of the code is facilitated if there is documentation in the code. This rule will ensure there are comments within the Artifact

Note that when there are many violations to display, a "Show More" button will be available:

SHOW MORE ▼

- +10
- +100
- All (118)

By default, only 10 violations are displayed to improve performance. You can choose to display more using the various options (+10, +100 etc.). By default an upper maximum of 5000 violations is set when the "All" option is clicked. You can change the upper maximum if required (see the [violationsCount](#) option in [Dashboard wide configuration options in json](#) - from the CAST AIP documentation).

Header icons

The following icons will be available:

Violations

educate download

<input type="checkbox"/>	OBJECT NAME	LOCATION	RISK	STATUS
<input type="checkbox"/>	[C:\CASTMS73\De ...	central\WebContent\WEB-INF\web.xml]	n/a	Unchanged

Educate	Click this icon to add the associated Rule to the Security Dashboard - Education list.
Download	Click this icon to export the list of violations to Excel .