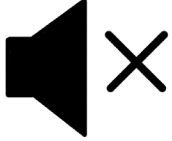


Risk Scores in Data Privacy Management

Ramesh Swaminathan

Housekeeping Tips



- Today's Webinar is scheduled for **1 hour**
- The session will include a webcast and then your questions will be answered live at the end of the presentation
- All dial-in participants will be muted to enable the speakers to present without interruption
- Questions can be submitted to "All Panelists" via the **Q&A option** and we will respond at the end of the presentation
- The webinar is **being recorded** and will be available to view on our **INFASupport YouTube channel** and **Success Portal**. The link will be emailed as well.
- Please take time to complete the **post-webinar survey** and provide your feedback and suggestions for upcoming topics.

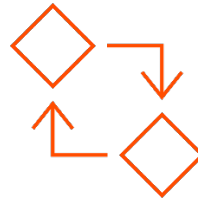
Feature Rich Success Portal



Bootstrap trial and
POC Customers



Enriched Customer
Onboarding
experience



Product Learning
Paths and Weekly
Expert Sessions



Informatica
Concierge with
Chatbot integrations



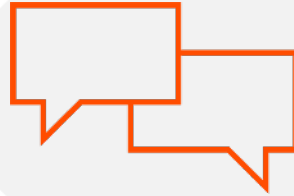
Tailored training and
content
recommendations

More Information



Success Portal

<https://success.informatica.com>



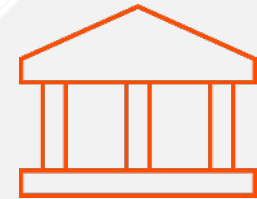
Communities & Support

<https://network.informatica.com>



Documentation

<https://docs.informatica.com>



University

<https://www.informatica.com/in/services-and-training/informatica-university.html>

Safe Harbor

The information being provided today is for informational purposes only. The development, release, and timing of any Informatica product or functionality described today remain at the sole discretion of Informatica and should not be relied upon in making a purchasing decision.

Statements made today are based on currently available information, which is subject to change. Such statements should not be relied upon as a representation, warranty or commitment to deliver specific products or functionality in the future.

Data Privacy Management

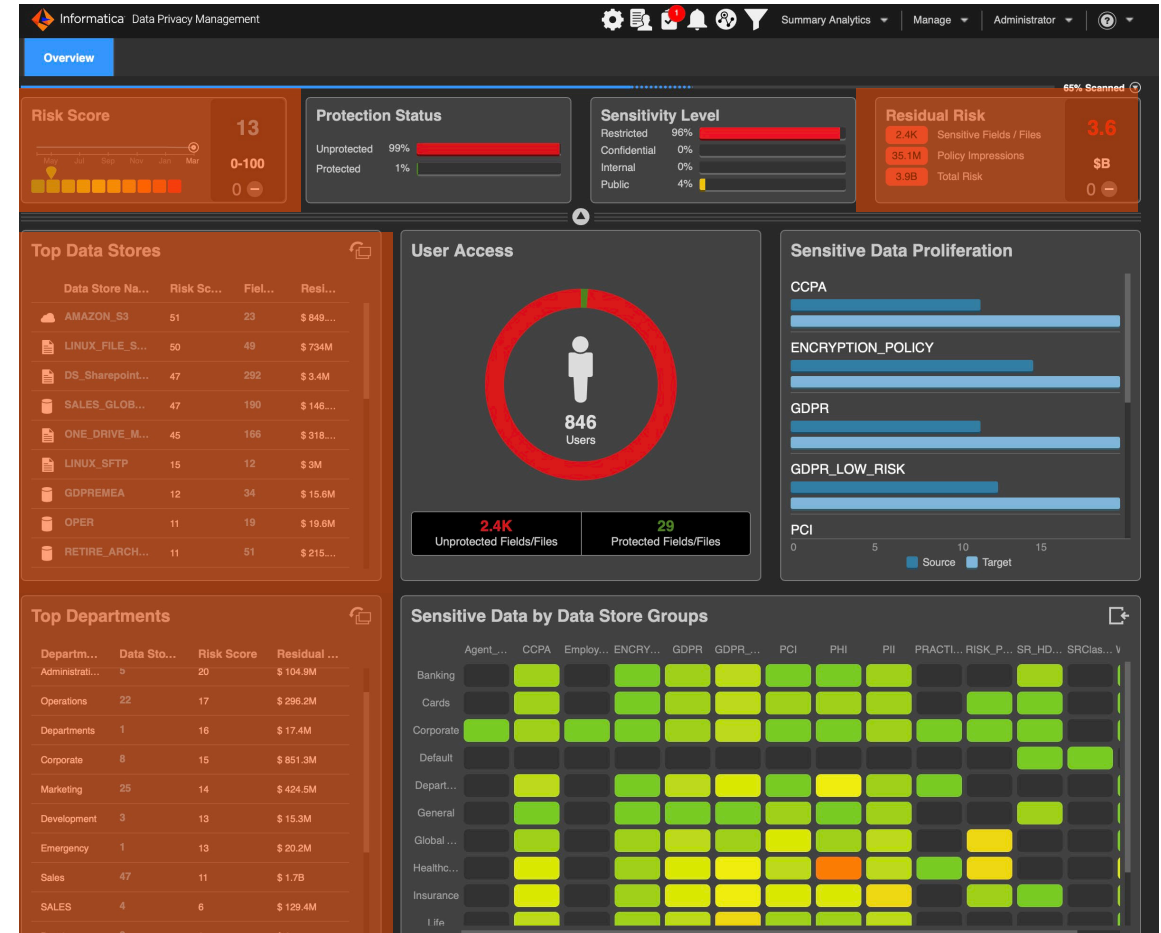
➤ Enterprise-wide data privacy and security intelligence

- Sensitive data discovery and classification
- Data subject registry
- Sensitive data proliferation analysis
- User activity on sensitive data
- Multi-factor risk scoring
- Risk rankings at enterprise, LOB, and department level
- Anomaly detection based on user activity
- Sensitive data policy-based alerting
- Data protection simulation and planning
- Workflow for manual or automated data protection and risk remediation



What is a Risk Score

- DPM evaluates the risk of unprotected personal & sensitive data stored across various data stores.
- DPM provides risk scores at various levels
 - Enterprise
 - Line of Business/Department
 - Individual Data Stores
- Risk Scores are visible from the Security Dashboard



Why do you need a risk score

- A Model for assessing risk associated to storing sensitive personal data in your organization
- Compare risks across different Departments & Specific Data Stores
- Prioritize various risk mitigation strategies
- Assess impact of risk mitigation undertaken over a period
- Report on impact of risk mitigation
- Analyze new risks as new data stores and new data get added into the system

Risk Score Calculation



Factors Influencing risk score calculation

Parameters	How is this Calculated	Values
Sensitive Levels	Sensitivity Level Defined in Policy	1 - 7
Residual Risk Cost	Count of policy impressions * Policy defined cost	Computed
Protection Status	Percentage of sensitive Fields protected in a data store	Computed
Sensitive Fields Count	Count of sensitive field in Data store	Computed
Policy Impressions	Distinct count of rows of all data domains in a data store	Computed
User Access	User access count	Computed
Targets	Number of targets for proliferation scans only	Computed

Factor – Sensitivity Level

Informatica Data Privacy Management

Overview Classification Policies X

New_Classification_Policy

1 2

Specify Properties and Assign Data Domains Match Conditions

Specify the properties for the new policy.

Name : CCPA

Description: New Policy for CCPA

Cost for Each Impression : 50

Sensitivity Level :
Public
Internal
Confidential
Restricted

Assign data domains to

0 Data Domains Selected

162 Assign Data Domains

Name	Data Domain Group	Description
Account_Number	SecureAISourceService	
Account_Status	SecureAISourceService	
AccountNumber	SecureAISourceService	Validates if the input matches account number.
Address	SecureAISourceService	*Validate if input is an address. Support addresses from US, Canada, Great Britain, New Zealand, France, Germany ...
Address_City	SecureAISourceService	SR City
Address_Country	SecureAISourceService	SR COUNTRY
Address_State	SecureAISourceService	

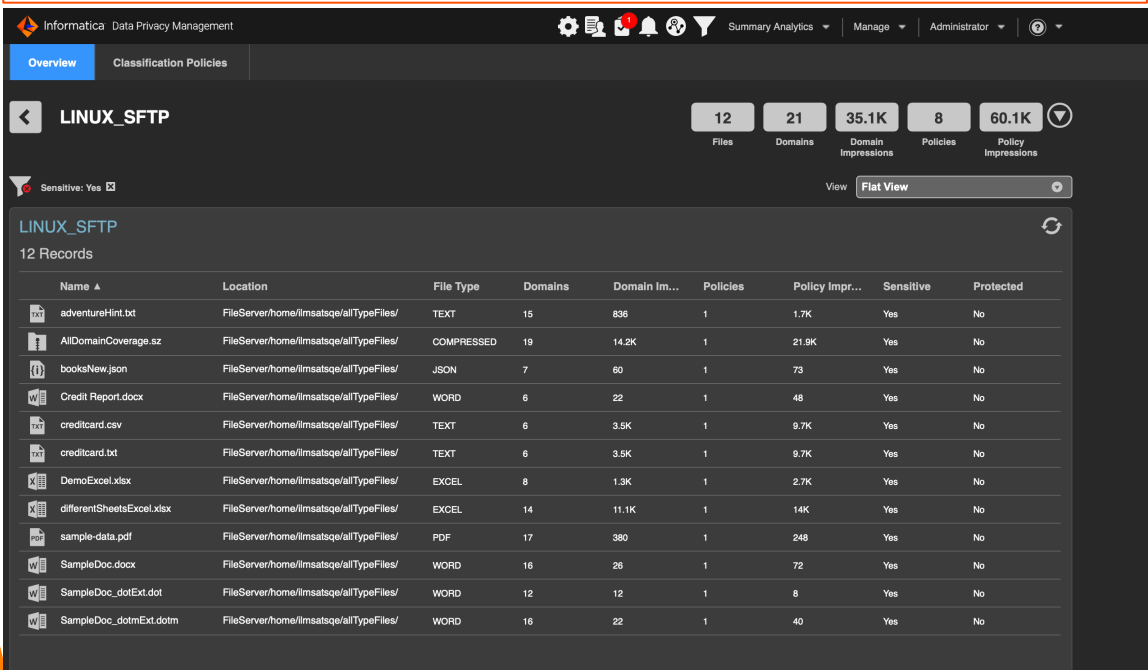
- Sensitivity Level is user defined in a Classification Policy
- The highest sensitivity level among the classification policies that match the data store.
- The default values for Sensitive levels are between 1 and 7

Factor – Residual Risk Cost

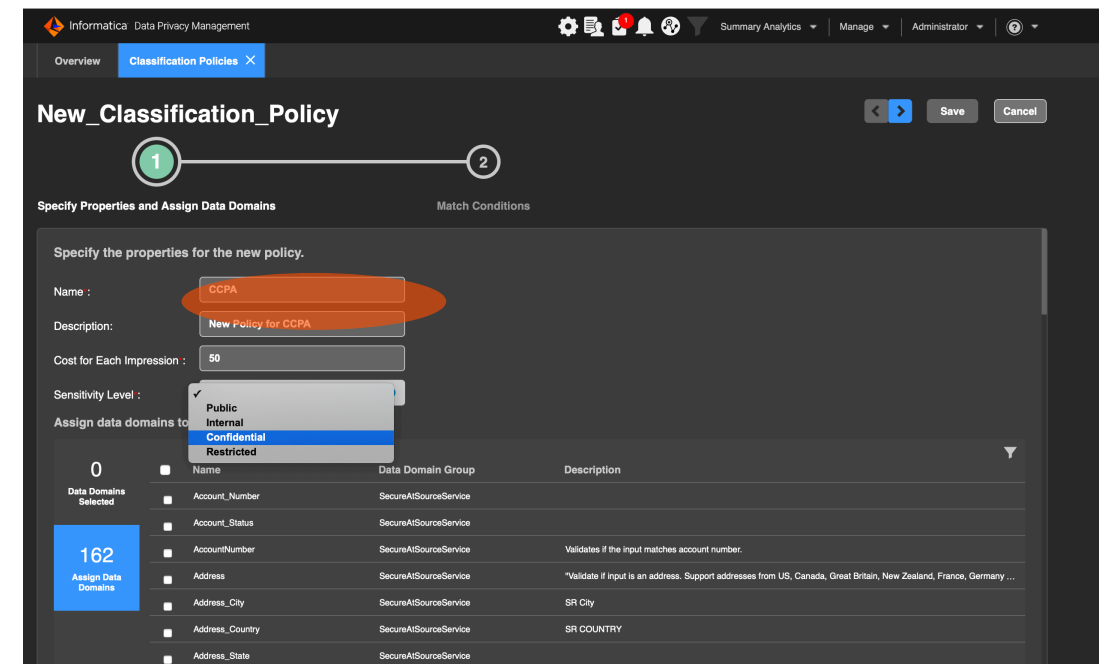
- Policy impressions multiplied by Cost defined in Classification Policy
- Based on calculated cost assigns a proportional weight for the factor in the risk score formula.

Policy Impressions = Number of policies associated to a data store

Policy defined cost = User defined cost in the Classification policy



Name	Location	File Type	Domains	Domain Im...	Policies	Policy Impr...	Sensitive	Protected
adventureHint.txt	FileServer/home/fimsatsq/allTypeFiles/	TEXT	15	836	1	1.7K	Yes	No
AllDomainCoverage.sz	FileServer/home/fimsatsq/allTypeFiles/	COMPRESSED	19	14.2K	1	21.9K	Yes	No
booksNew.json	FileServer/home/fimsatsq/allTypeFiles/	JSON	7	60	1	73	Yes	No
Credit_Report.docx	FileServer/home/fimsatsq/allTypeFiles/	WORD	6	22	1	48	Yes	No
creditcard.csv	FileServer/home/fimsatsq/allTypeFiles/	TEXT	6	3.5K	1	9.7K	Yes	No
creditcard.txt	FileServer/home/fimsatsq/allTypeFiles/	TEXT	6	3.5K	1	9.7K	Yes	No
DemoExcel.xlsx	FileServer/home/fimsatsq/allTypeFiles/	EXCEL	8	1.3K	1	2.7K	Yes	No
differentSheetsExcel.xlsx	FileServer/home/fimsatsq/allTypeFiles/	EXCEL	14	11.1K	1	14K	Yes	No
sample-data.pdf	FileServer/home/fimsatsq/allTypeFiles/	PDF	17	380	1	248	Yes	No
SampleDoc.docx	FileServer/home/fimsatsq/allTypeFiles/	WORD	16	26	1	72	Yes	No
SampleDoc_dotExt.dot	FileServer/home/fimsatsq/allTypeFiles/	WORD	12	12	1	8	Yes	No
SampleDoc_dotmExt.dotm	FileServer/home/fimsatsq/allTypeFiles/	WORD	16	22	1	40	Yes	No



New Classification Policy

Specify Properties and Assign Data Domains

Specify the properties for the new policy.

Name : **CCPA**

Description: **New Policy for CCPA**

Cost for Each Impression : **50**

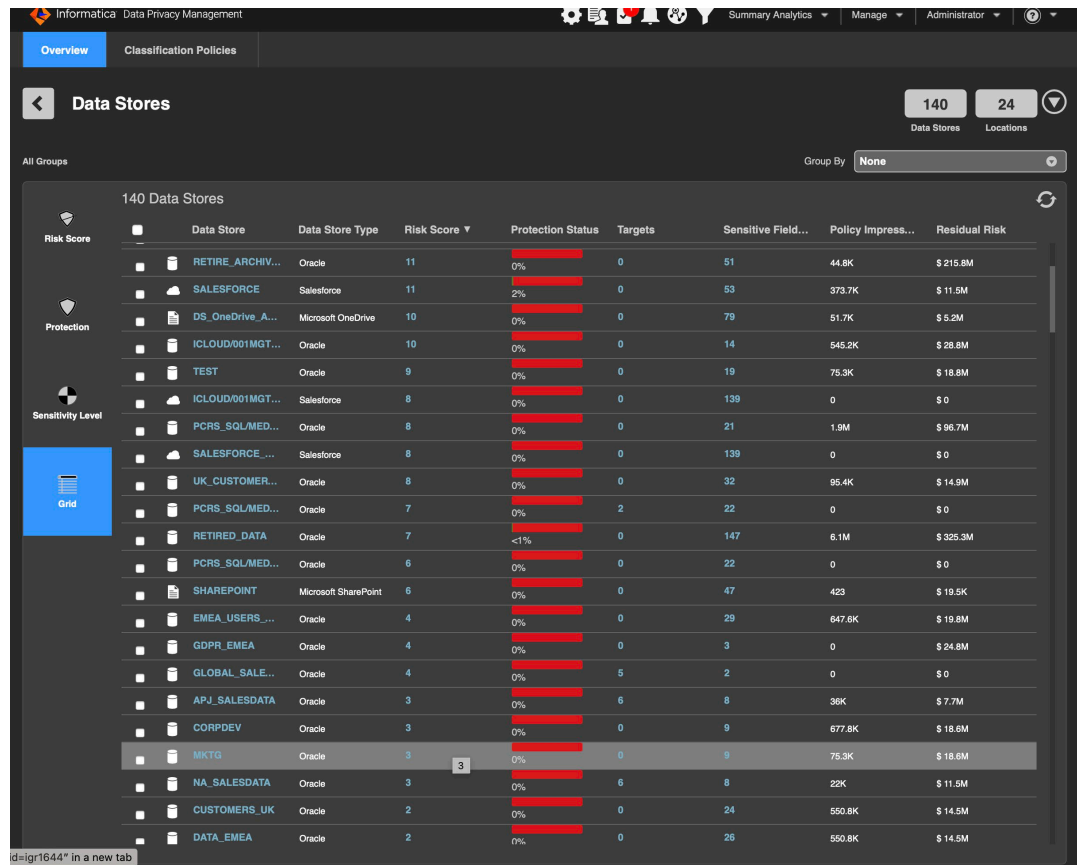
Sensitivity Level : **Confidential**

Assign data domains to

162 Assign Data Domains

Name	Data Domain Group	Description
Account_Number	SecureAiSourceService	
Account_Status	SecureAiSourceService	
AccountNumber	SecureAiSourceService	Validates if the input matches account number.
Address	SecureAiSourceService	*Validate if input is an address. Support addresses from US, Canada, Great Britain, New Zealand, France, Germany ...
Address_City	SecureAiSourceService	SR City
Address_Country	SecureAiSourceService	SR COUNTRY
Address_State	SecureAiSourceService	

Factor – Protection Status



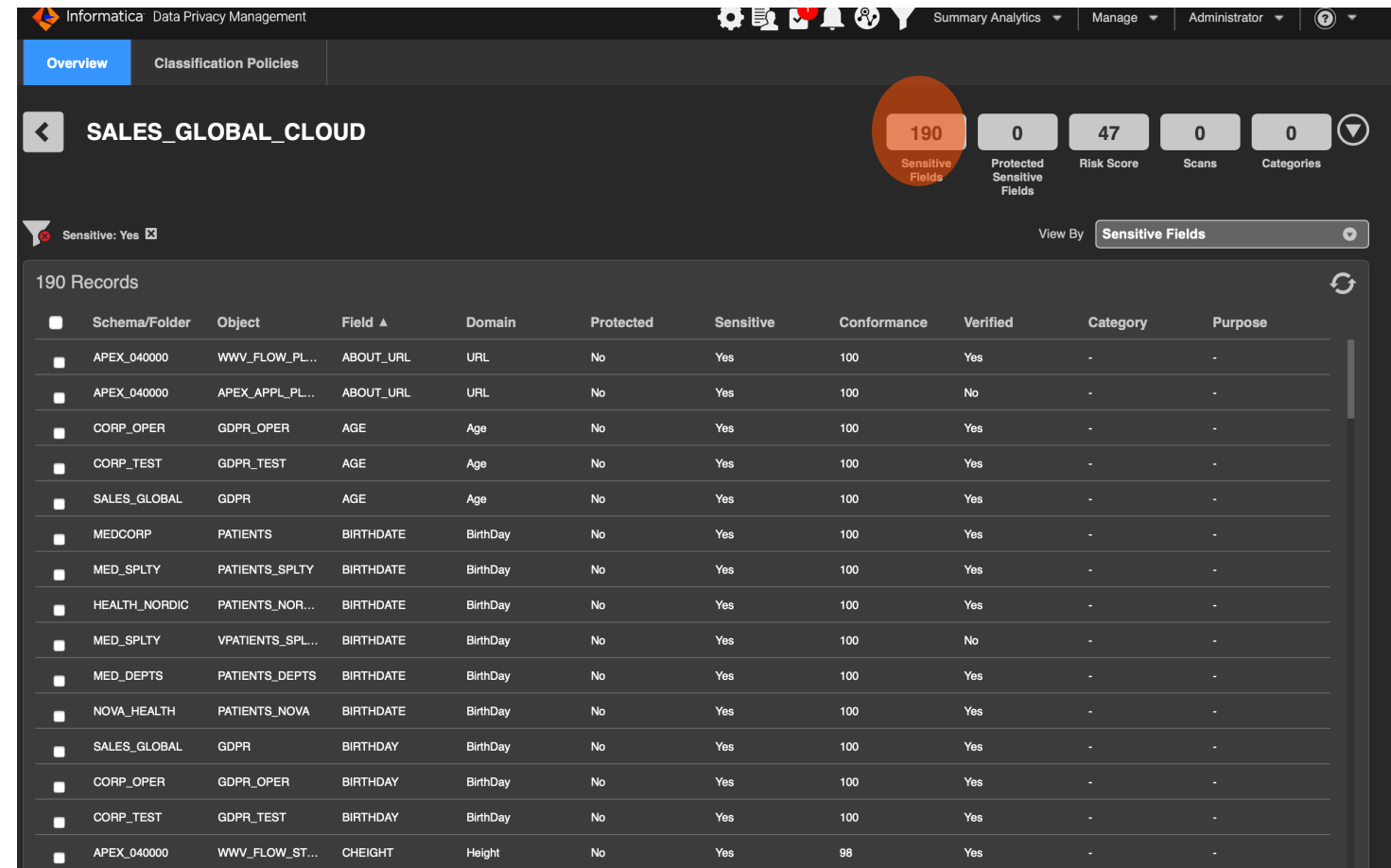
	Data Store	Data Store Type	Risk Score	Protection Status	Targets	Sensitive Field...	Policy Impress...	Residual Risk
	RETIRE_ARCHIV...	Oracle	11	0%	0	51	44.8K	\$ 215.8M
	SALESFORCE	Salesforce	11	2%	0	53	373.7K	\$ 11.5M
	DS_OneDrive_A...	Microsoft OneDrive	10	0%	0	79	51.7K	\$ 5.2M
	ICLOUD/001MGT...	Oracle	10	0%	0	14	545.2K	\$ 28.8M
	TEST	Oracle	9	0%	0	19	75.3K	\$ 18.8M
	ICLOUD/001MGT...	Salesforce	8	0%	0	139	0	\$ 0
	PCRS_SQL/MED...	Oracle	8	0%	0	21	1.9M	\$ 96.7M
	SALESFORCE_...	Salesforce	8	0%	0	139	0	\$ 0
	UK_CUSTOMER...	Oracle	8	0%	0	32	95.4K	\$ 14.9M
	PCRS_SQL/MED...	Oracle	7	0%	2	22	0	\$ 0
	RETIRED_DATA	Oracle	7	<1%	0	147	6.1M	\$ 325.3M
	PCRS_SQL/MED...	Oracle	6	0%	0	22	0	\$ 0
	SHAREPOINT	Microsoft SharePoint	6	0%	0	47	423	\$ 19.5K
	EMEA_USERS_...	Oracle	4	0%	0	29	647.6K	\$ 19.8M
	GDPR_EMEA	Oracle	4	0%	0	3	0	\$ 24.8M
	GLOBAL_SALE...	Oracle	4	0%	5	2	0	\$ 0
	APJ_SALESDATA	Oracle	3	0%	6	8	38K	\$ 7.7M
	CORPDEV	Oracle	3	0%	0	9	677.8K	\$ 18.6M
	MKTG	Oracle	3	0%	0	9	75.3K	\$ 18.6M
	NA_SALESDATA	Oracle	3	0%	6	8	22K	\$ 11.5M
	CUSTOMERS_UK	Oracle	2	0%	0	24	550.8K	\$ 14.5M
	DATA_EMEA	Oracle	2	0%	0	26	550.8K	\$ 14.5M

The percentage of unprotected fields in a data store that match data domains in the classification policy used in the scan. The higher the percentage, the higher the risk.

Factor – Sensitive Field Count

Count of Sensitive Field Fields in a Data Store or count of sensitive files in a store

Based on the number of sensitive fields or files, DPM assigns a proportional weight for the factor in the risk score formula.

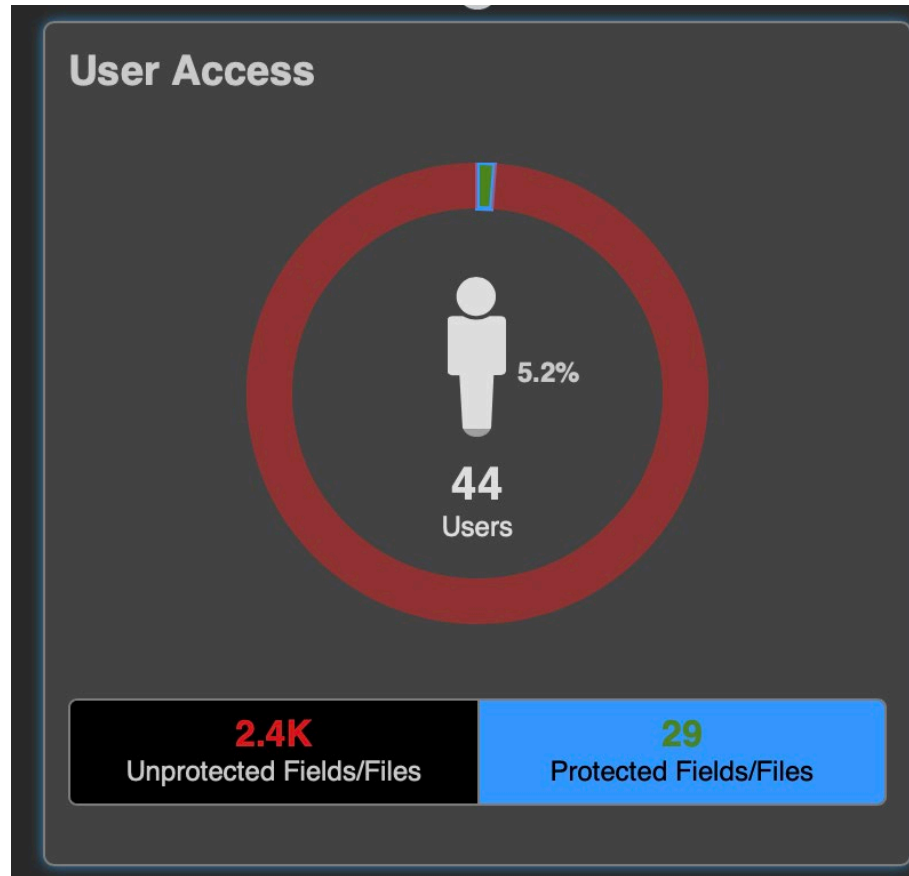


Schema/Folder	Object	Field	Domain	Protected	Sensitive	Conformance	Verified	Category	Purpose
APEX_040000	WWW_FLOW_PL...	ABOUT_URL	URL	No	Yes	100	Yes	-	-
APEX_040000	APEX_APPL_PL...	ABOUT_URL	URL	No	Yes	100	No	-	-
CORP_OPER	GDPR_OPER	AGE	Age	No	Yes	100	Yes	-	-
CORP_TEST	GDPR_TEST	AGE	Age	No	Yes	100	Yes	-	-
SALES_GLOBAL	GDPR	AGE	Age	No	Yes	100	Yes	-	-
MEDCORP	PATIENTS	BIRTHDATE	BirthDay	No	Yes	100	Yes	-	-
MED_SPLTY	PATIENTS_SPLTY	BIRTHDATE	BirthDay	No	Yes	100	Yes	-	-
HEALTH_NORDIC	PATIENTS_NOR...	BIRTHDATE	BirthDay	No	Yes	100	Yes	-	-
MED_SPLTY	VPATIENTS_SPL...	BIRTHDATE	BirthDay	No	Yes	100	No	-	-
MED_DEPTS	PATIENTS_DEPTS	BIRTHDATE	BirthDay	No	Yes	100	Yes	-	-
NOVA_HEALTH	PATIENTS_NOVA	BIRTHDATE	BirthDay	No	Yes	100	Yes	-	-
SALES_GLOBAL	GDPR	BIRTHDAY	BirthDay	No	Yes	100	Yes	-	-
CORP_OPER	GDPR_OPER	BIRTHDAY	BirthDay	No	Yes	100	Yes	-	-
CORP_TEST	GDPR_TEST	BIRTHDAY	BirthDay	No	Yes	100	Yes	-	-
APEX_040000	WWW_FLOW_ST...	CHEIGHT	Height	No	Yes	98	Yes	-	-

Factor – Policy Impressions

- The number of distinct records, called impressions, that match the data domain match condition specified in the classification policy.
- First, DPM determines the impression count at the data domain level. The data domain impression count is the sum of the unique values in each field that match the data domain.
- Next, DPM uses the data domain impression count and the data domain match condition in the classification policy to determine the policy impressions.
- Based on the policy impression count, DPM assigns a proportional weight for the factor in the risk score formula.

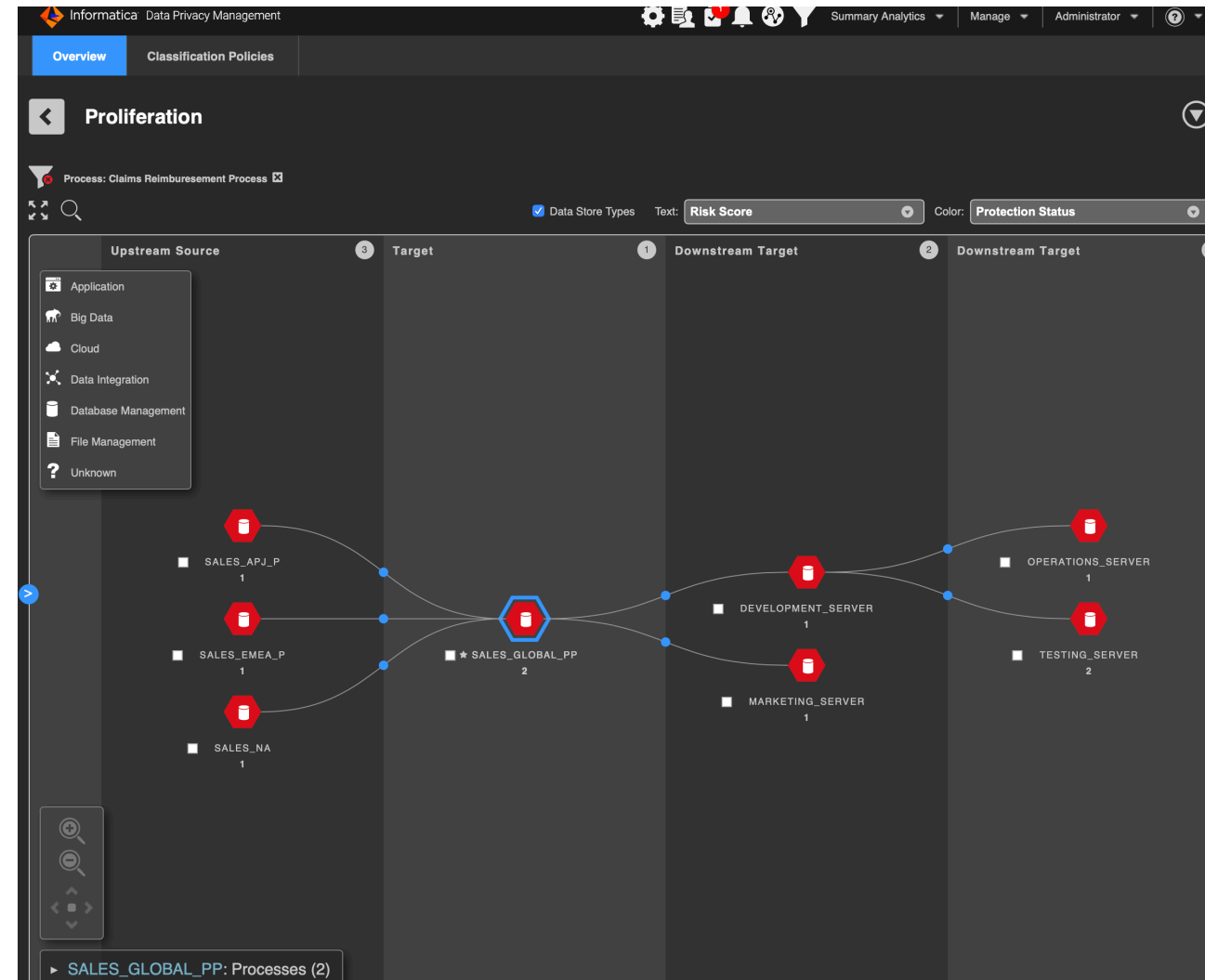
Factor – User Access Count



The number of users with an active status and with access to the data store. The larger the number of active users, the higher the risk.

Factor - Targets

- The number of target data stores to which one or more sensitive fields proliferated. The larger the number of targets, the higher the risk.
- Based on the number of targets, DPM assigns a proportional weight for the factor in the risk score formula.

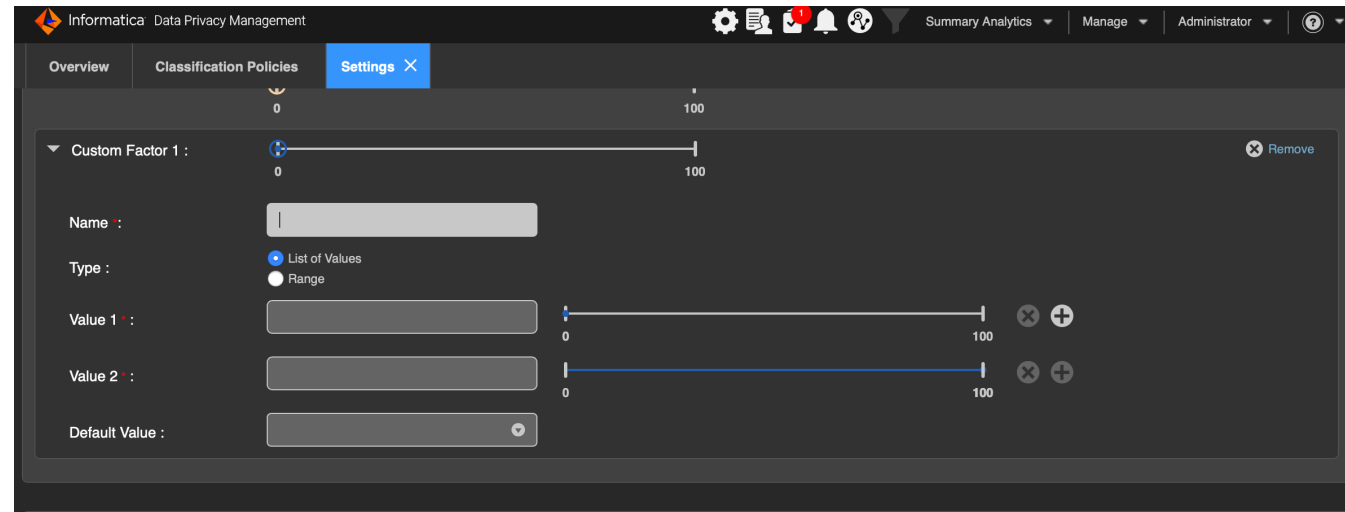


Customizing Risk Score Calculation



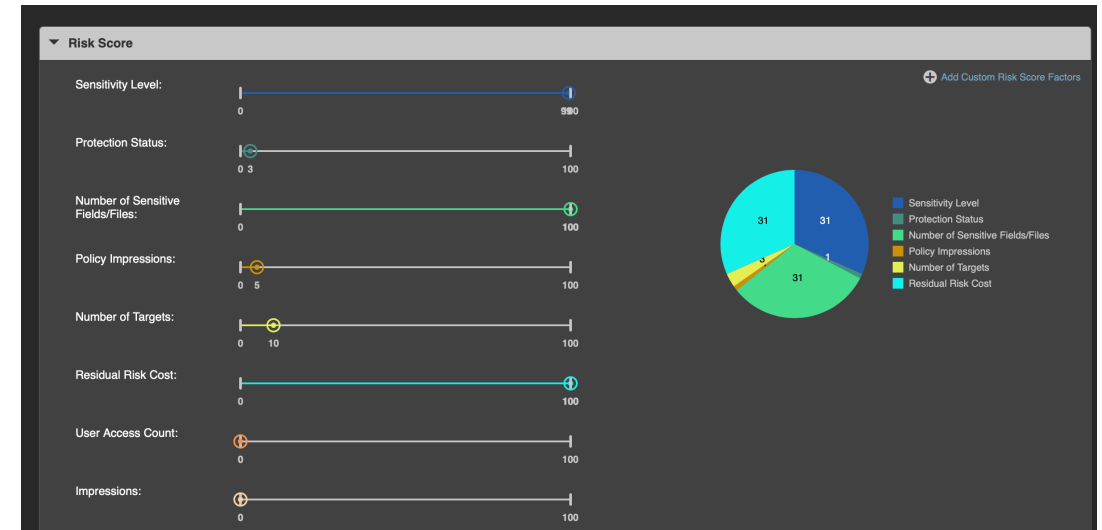
Adding Custom Factors

- A user-defined factor can be added to assess a risk not captured by DPM standard risk factors from the settings page
- For each custom factor, you can specify between two and five values or ranges.
- One value or range must have a weight of 0 to indicate the least impact on risk score.
- Another value or range must have a weight of 100 to indicate the maximum impact on risk score.
- DPM allows addition of up to 5 custom factors



Customizing Standard Factors

- Change the default weightage for various parameters based on your Organizations policy
- Certain factors can be made zero if your Organization is not Interested in that parameter
- This is available in the settings page



When is risk score
calculated



Evaluating Risk Scores

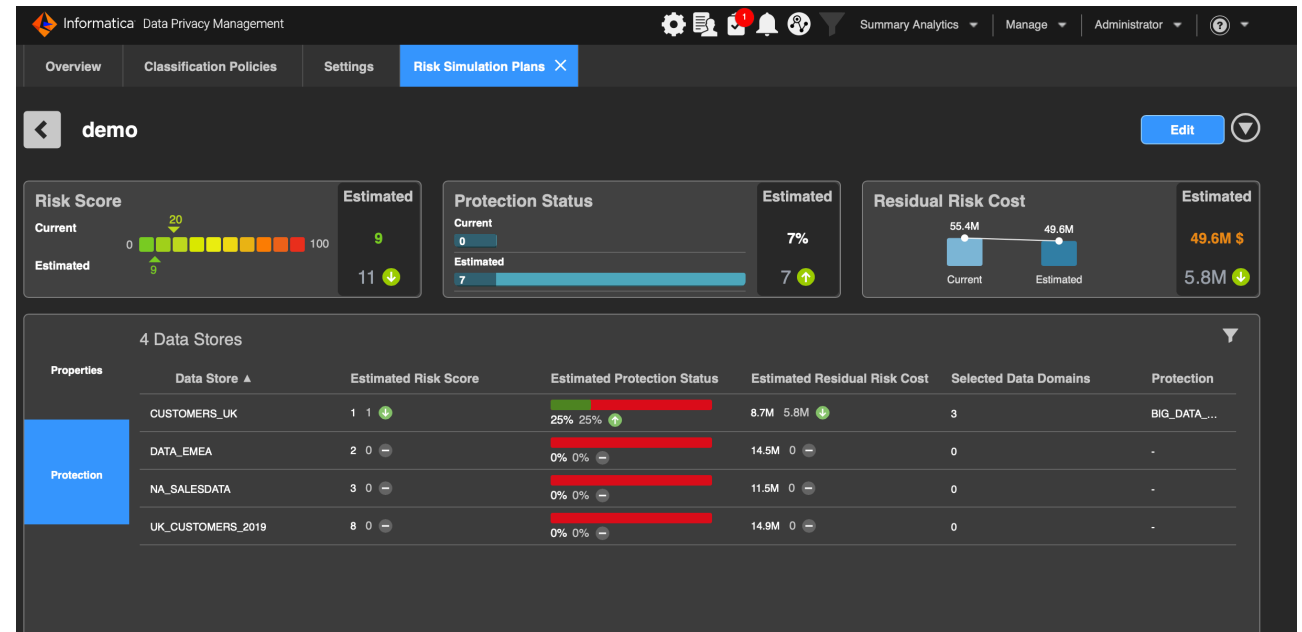
- DPM evaluates and recalculates risk scores when:
 - New data domains are added to the system and these are added to classification policies
 - Modify existing classification policies – change cost, add rules, domains
 - Scan data stores with the appropriate classification policies.
 - Import any changes to sensitivity or protection status.
 - Import custom lineage.
 - Import a white list and a black list.
 - Stream user activity.
 - Change the Slider value of risk factor parameters
 - add one or more custom factors.
 -

Risk Simulation



Why risk simulation

- Risk simulation helps in doing “what if” Analysis as part of Protection planning
- Provides insights into ways you can reduce risk in your IT portfolio
- Helps prioritize creation of protection strategies for high risk data stores
- Create multi plans to compare benefits before investing in actual protection mechanisms



Questions?



Thank You

Ramesh Swaminathan
rswamina@informatica.com