SP-GDPR: SCAN-ASSESS-MANAGE TOOL

What APP?

The goal of this app is to assess/ discover/find-search/identify GDPR: Privacy, Organizational Policies and Business Rules for related flags/issues/breaches/non-compliances – defined as “Flags” in this app.

The business scope of the app is to provide SharePoint On-Premise owners/clients with an on-going and automated e-discovery tool, which continuously evaluates “Flags”.

THE STORIES – GDPR Tool

1. <https://enterprise.microsoft.com/en-gb/articles/roles/discover-gdpr/>

1. As A “DirectorBoardMember” and GDPR Risk Manager
   1. I need to see high level charts and graphs and summary tables at difference levels and potentially by department leadership and individual user level drilldowns
2. As A “DataProtectionOfficer” and Assessment Tool Administrator I want
   1. To define terms for keyword search and regex
      1. => use List and Code from COBC project & create SQL replica and Form ...
   2. To define a Master site and instances per web-application such that it drives the operations for the “admin control center” in a flexible and extensible way and additionally add ability to trigger Workflows ... -> use Sainsbury’s architecture
   3. To view and perform actions (exempt, resolve, delete …) on potential GDPR issues/flags for data created-full-controlled by any user I select.
   4. Evaluate access/usage logs and check for potential fraud/leaks detection ..
3. As A “Document Owner” I want
   1. To view and perform actions (exempt, resolve, archive-hold, delete …) on potential GDPR issues/flags for data created-full-controlled by me.
   2. Make Requests for information Personal privacy, Controls and notifications, Transparency of policies, IT and training - <https://www.microsoft.com/en-us/TrustCenter/Privacy/gdpr/default.aspx>
4. *<=credits?#notme*

THE TechnicalS

1. Information Architecture
   1. Implementation options-duplications: SharePoint lists, SQL/Azure/AWS Database, NoSQL/GraphDB
   2. **SharePoint lite – Farm, WebApp, WebSites, ListLibs, ListLibItems**
   3. GDPR – GDPRFlags, GDPRLogs, AlertsNotification(SignalR), Request-2-Process, Policy-Enforcement
   4. OLTP – AppUsersAndRoles, InclusionExclusions, PatternsTerms master tables...
   5. OLAP – SQL ETL (SSIS): SSAS/DAX-models for Reporting
2. SharePoint ADMIN command center – taxonomy and managed-features and app-metadata
   1. **(Source) CEWS for Search-based data collection/discovery approach**
   2. (Source) WorkItemTimer/Azure-Web Jobs for **Non-Search-based** data collection/discovery approach
   3. (Sink) ETL processed data in-to SQL database using GDPR Core services
3. GDPR Core Services (API - Microservices)
   1. **IRM(Records/Document/ECM policies), Pattern-Match & User-Terms-Search(eDiscovery)**
   2. Cloud based services-api and ML.Net
   3. .Net Standard library, JSON, EF-Core
   4. PowerShell wrappers/scripts
4. UI – GRID+GRAPH+FORMS [ES6/Typescript]
   1. **Plain Jquery/JS => Datatable.net/AG-Grid, Amcharts/D3, SemanticUI/FabricUI**
      1. <https://www.ag-grid.com/features-overview/>
      2. <https://www.amcharts.com/v4/>
      3. <https://ecomfe.github.io/echarts-examples/public/index.html>
   2. Angular + BootstrapUI
   3. React (with Ionic4) + FabricUI
   4. Express, MongoDB/LocalDB, Total.js Messenger & Voice-api-integrations with Dialogflow+MSBot+Alexa+Teams…
   5. SHAREPOINT Provider-hosted Add-Ins wrappers
   6. SPFX

Information Architecture

* 1. **SensitiveInformationType**
  2. **ContentSourceConnect**
  3. **RegisteredAppUsers**
  4. **RequestContentSourceScan**
  5. **RequestScanDataCataloging**

**(AppGDPRFlags)**

* 1. **------------------**
  2. **AppUsers**
  3. **SPListsLibraries**
  4. **SPItems**
  5. **AppGDPRFlags**
  6. **AppContentItems?**

**RegisteredAppUsers**

|  |  |  |
| --- | --- | --- |
| **Field-Name** | **Field-Type** | **Description-Notes** |
| APPUSERID | UUID |  |
| LoginID | Domain/loginname | formlogin|emailid … |  |
| LoginType | Windows|Forms |  |
| DisplayName | Text(255) |  |
| Role | Text(255) | {AppAdmin | EndUser| PowerUser | ReportsOnly } |

**SensitiveInformationType**

|  |  |  |
| --- | --- | --- |
| **Field-Name** | **Field-Type** | **Description-Notes** |
| SITID | UUID |  |
| NameTitle | Text(255) |  |
| Description | Text(Max) |  |
| Criticality | Choice(Text) |  |
| ProcessingHandlerConfig | Text(Max) | {  "ProcessingHandlerUUID": GUID|URL  "ProcessingType": WorkItemTimerJob|WorkFlow|RESTAPI  "HandlerDataType": TextOnly|Policy|BinaryFiles|FilesAndText  "HandlerMetaInfo": {  RegexPatterns: { }  KeywordsCSV: { }  RESTAPIHeaders: { }  }  } |

**ContentSourceConnect**

|  |  |  |
| --- | --- | --- |
| **Field-Name** | **Field-Type** | **Description-Notes** |
| CSCID | UUID |  |
| NameTitle | Text(255) |  |
| Description | Text(Max) |  |
| CSCConfig | Text(Max) | {  "Type": {SHAREPOINT, SQLDB, RESTAPI …}  "TypeConfig": [ "SHAREPOINT": { IsSearchBased: true|false, IncludeSites:{ \*, "<http://a....>"}, ExcludeSites:{ "<http://x...>", "<http://y...>"} };|;  "SQLDB": { SQLQuery:{ "select \* from view\_table\_proc\_func"} , "ConnectionString": "……" }  ];|;  "RESTAPI":{ "UrI": "<http://...../_api/>", }    } |

**RequestContentSourceScan**

|  |  |  |
| --- | --- | --- |
| **Field-Name** | **Field-Type** | **Description-Notes** |
|  |  |  |
| RequestID | UUID |  |
| OwnedBy | RegisteredAppUser(Single) |  |
| StartDate | Datetime |  |
| LastRunDate | Datetime |  |
| SharedWith | RegisteredAppUser(Multiple) |  |
| NameTitle | Text(255) |  |
| Description | Text(Max) |  |
| Status | Choice(Text) | {NotStarted, InProgress, Completed, Failed, Archieved } |
| ContentSources | LinkedList (Multiple, ContentSourceConnect) |  |
| EncryptionPrivateKey | Text(Max) |  |
| EncryptionPublicKey | Text(Max) |  |
| SensitiveInfoTypesForScan | LinkedListItem (Multiple: SensitiveInfomationType list) |  |
| RunForAllSensitiveInfoTypes | Yes|No |  |

**RequestedScanDataCataloging**

|  |  |  |
| --- | --- | --- |
| **Field-Name** | **Field-Type** | **Description-Notes** |
| DataCatalogID | UUID |  |
| RequestID | UUID |  |
| CSCID | UUID |  |
| SITID | UUID |  |
| IsSharePointContent |  |  |
| SPWebApplicationGUID |  |  |
| SPWebsGUID |  |  |
| IsListLibraryFolderXOR | Choice | {List, Library, Folder} |
| SPListLibGUID |  |  |
| .. |  |  |
| .. |  |  |
| .. |  |  |

Machine generated alternative text:
SPFarms 
Column Name 
Tableld 
Id 
Name 
Metalnfo 
Modified 
Data Type 
uniqueidentifier 
nvarchar(lOO) 
nvarchar(MAX) 
datetime 
Allow Nulls 
SPWebA 
Column Name 
Tableld 
Parentld 
Name 
Meta Info 
Modified 
Data Type 
int 
uniqueidentifier 
nvarchar(100) 
nvarchar(MAX) 
datetime 
Allow Nulls 
SPWebSites 
Column Name 
Tableld 
ParentTableld 
SPSiteld 
SPWebld 
SPSiteRelativePath 
SPW ebAbs01uteUrl 
SPWebTitleText 
Data Type 
bigint 
int 
uniqueidentifier 
uniqueidentifier 
nchar(10) 
nchar(lO) 
nchar(10) 
Allow Nulls 

Machine generated alternative text:
AppGDPRFlags 
Column Name 
Tableld 
AssociatedAssetl d 
AssociatedUserld 
GDPRFlagCategory 
GDPRFlagDetails 
GDPRFlagMetalnfo 
IsMarkedExempt 
IsMarkedResolved 
GDP RExemptRes01vedN0.„ 
Data Type 
uniqueidentifier 
uniqueidentifier 
bigint 
nchar(10) 
nvarchar(255) 
nvarchar(MAX) 
bit 
bit 
nvarchar(MAX) 
Data Type 
bigint 
nchar(50) 
nvarchar(255) 
bit 
bit 
bit 
hierarchyid 
Allow Nulls 
Allow Nulls 
SPItems 
Column Name 
Tableld 
SPItemld 
SPItemAbsolutePath 
SPItemTitleText 
IsAttachment 
SPListsLibrariesTableld 
SPWebsTableld 
SPWebAppsTableld 
SPFarmTable1d 
Metalnfo 
Modified 
ISMa rkedDeleted 
Data Type 
uniqueidentifier 
uniqueidentifier 
nchar(10) 
nchar(lO) 
bit 
bigint 
bigint 
bigint 
bigint 
nvarchar(MAX) 
datetime 
bit 
Data Type 
uniqueidentifier 
nvarchar(50) 
nvarchar(50) 
nvarchar(50) 
bit 
varbinary(MAX) 
nvarchar(MAX) 
datetime 
Allow Nulls 
SPListsLibraries 
Column Name 
Tableld 
ParentTableld 
Modified 
Id 
Name 
Metalnfo 
IsList 
AbsolutePath 
Allow Nulls 
Data Type 
bigint 
nchar(10) 
datetime 
uniqueidentifier 
nvarchar(100) 
nvarchar(MAX) 
bit 
nchar(lO) 
Allow Nulls 
A 
A 
ontentltems 
Column Name 
Tableld 
ContentltemName 
ContentltemType 
ContentltemURl 
IsMa rkedDeleted 
ItemContents 
Metalnfo 
Modified 
Users 
Column Name 
Tableld 
AppLoginld 
SPUserLogin 
IsAppAdmin 
IsManagement 
IsUserManager 
AppUserTablelds 