

IBM OpenPages with Watson
Version 8.2.0.3

SecurityScorecard Upgrade ReadMe



NOTE

Before using this information and the product it supports, read the information in the “Notices” section of this document.

Product Information

This document applies to IBM OpenPages with Watson 8.2.0.3 and may also apply to subsequent releases.

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TPRM 8.2.0.3 SecurityScorecard Upgrade Cookbook

Introduction

The SecurityScorecard feature in IBM OpenPages® Third Party Risk Management (TPRM) 8.2.0.3 has the following parts:

- **SecurityScorecard Imports:** This new feature enables clients to import Vendor data from SecurityScorecard into OpenPages. The import creates Vendor objects for the incoming Vendor data.

Note: IBM OpenPages Third Party Risk Management (TPRM) was previously named VRM. Loader files and profiles still use “VRM” in their names.

Prerequisites

SecurityScorecard provides a subscription service, which is sold separately from IBM OpenPages® with Watson™. Customers must have a subscription and meet its prerequisites before they set up the SecurityScorecard feature in OpenPages. For example, customers must know the API connection information for the SecurityScorecard JSON feeds.

Determining an upgrade strategy

This cookbook assumes that you are familiar with developing and deploying OpenPages solutions and that you know how to use the related technologies, such as ObjectManager, XML, and server access.

This cookbook combines a number of loader steps and manual procedures. It's up to the Services team to determine what steps need to be done in a client engagement. **For a customer engagement, it is likely that you'll refactor the loader XML files into your own deliverable package** to simplify the manual steps and to work around any differences due to a client's customizations.

Please note that the automated scripts and manual instructions set the ObjectManager setting, configuration.manager.vendor.mode = true, which will override any changes you may have made to existing profiles, views, etc. in the package. If you do not want this, please refactor the loader XML files to suit your needs.

In some cases, a client's existing solutions might not work with the new dependencies. You'll need to perform remediation on a case-by-case basis.

SecurityScorecard import

With this feature, clients can retrieve data from a SecurityScorecard *feed* by using the API configuration that is provided to each client when they purchase a subscription. The feature is hard coded to create a Vendor object type for incoming data. This object type has a required set of non-configurable fields.

For this feature to work end-to-end, you must set up OpenPages with:

- Schema
 - The updated OPSS-SecurityScorecard field group

- Registry settings
- Profiles that include the updated field group and new fields
- System views for the updated object types
- A default business entity structure

Notice: Unlike solutions updates that you've done in the past, due to the technical and legal specifics for the SecurityScorecard data feed import, many of the schema elements that are required for this feature **are not configurable**. The fields, object types, and certain other settings are mandatory and cannot be configured to other values.

Loading the SecurityScorecard changes in 8.2.0.3

The 8.2.0.3 loader files are not on the installation media. The OpenPages Support team can give clients access to a package that contains the 8.2.0.3 loader files.

All the changes for SecurityScorecard in 8.2.0.3 are documented in later sections in this cookbook. To simplify the update and to save time, we've provided a shell script that loads all the files. You can choose to load the changes automatically or manually select the changes as appropriate for your client's environment.

Additionally, you can load the files remotely using the ObjectManager client or, for non-Cloud Pak for Data environments, load the files from the application server.

Loading files remotely

As of 8.2.0.3, you can now import the loader files remotely by using the ObjectManager client tool, which you download separately. For instructions on how to install the ObjectManager client tool, see the [IBM OpenPages with Watson Administrator's Guide](#).

To load the feeds remotely, you must:

1. Download the package and expand it to your local machine, later referred to as the FEED_FOLDER_LOCATION.
2. Set up the environment variable, OPC_BIN_DIR, to point to the tools' bin folder.
3. Set up the URL of the remote server in `openpages-tools-client.properties`:
`rest.url.path=https://<host:port>/grc/api.`

Note: To set up the feed on IBM OpenPages for IBM Cloud Pak for Data, you must use the ObjectManager client.

Loading files from the application server

To set up the feed from the application server, you must download the package and expand the package contents to your application server at the location: `PATH_IN_OP_SERVER/Upgrade-Accelerators/VRM`, later referred to as the FEED_FOLDER_LOCATION.

8.2.0.3 Package

The 8.2.0.3 package contains all the changes for SecurityScorecard support since its initial release in 8.2.0.1. Each folder contains the release-specific changes, which can be loaded into 8.2.0.3 as follows:

VRM_SecurityScorecard_8201_Loader_Files	Folder containing the 8.2.0.1 changes only
VRM_SecurityScorecard_8203_Loader_Files	Folder containing the 8.2.0.3 changes only

Which changes to apply depends on the current version that is loaded.

Pre 8.2.0.1 → 8.2.0.3	Load the changes in all the folders as per instructions below.
8.2.0.1 → 8.2.0.3	Load the changes in the VRM_SecurityScorecard_8203_Loader_Files folder as per instructions below.

Note: Use only the 8.2.0.3 package to load the changes across releases. Do not attempt to use previously published packages to load or upgrade to 8.2.0.3.

Loading SecurityScorecard object changes automatically

Upgrading from a pre-8.2.0.1 install or new 8.2 install with fix pack 8.2.0.3

Go to the location where you copied the SecurityScorecard package.

Follow these steps:

1. Go to FEED_FOLDER_LOCATION.
2. Do one of the following steps:
 - If running from a Linux system:
 - Run: `chmod +x Run_VRM_SecurityScorecard_Full.sh`
 - `./Run_VRM_SecurityScorecard_Full.sh OpenPagesAdministrator PASSWORD`
 - If running from a Microsoft Windows system:
 - Set the `ObjectManager.properties` flags
`configuration.manager.vendor.mode = true`
`configuration.manager.force.update.object.strings=true`
`configuration.manager.force.update.application.strings=true`
 - Run: `Run_VRM_SecurityScorecard_Full.bat OpenPagesAdministrator PASSWORD`
 - Reset the `ObjectManager.properties` flags back to false
`configuration.manager.vendor.mode = false`
`configuration.manager.force.update.object.strings=false`
`configuration.manager.force.update.application.strings=false`

Upgrading from an 8.2.0.1 install

Go to the location where you copied the SecurityScorecard package.

Follow these steps:

1. Go to the FEED_FOLDER_LOCATION on your OpenPages application sever.
2. Go to the VRM_SecurityScorecard_8203_Loader_Files directory and do one of the following steps:
 - If running from a Linux system:

- Run:
 `chmod +x VRM_SecurityScorecard_8203_loader.sh`
 `./VRM_SecurityScorecard_8203_loader.sh OpenPagesAdministrator`
 PASSWORD
- If running on a Microsoft Windows system:
 - Run: `VRM_SecurityScorecard_8203_loader.bat OpenPagesAdministrator`
 PASSWORD

Loading SecurityScorecard object changes manually

In this section, we go over all the commands that are run and explain the changes. You can run the commands in this section instead of using the shell or batch scripts.

Before running any of the commands below, set the following flags in the ObjectManager.properties file to true:

```
configuration.manager.vendor.mode = true
configuration.manager.force.update.object.strings=true
configuration.manager.force.update.application.strings=true
```

Upgrading from a pre-8.2.0.1 install or a new 8.2 install with fix pack 8.2.0.3

Loading the updated Vendor schema and its labels (8.2.0.1)

```
./ObjectManager.sh l c OpenPagesAdministrator <password>
FEED_FOLDER_LOCATION/VRM_SecurityScorecard_8201_Loader_Files/Schema/
SecurityScorecard_object_schema
./ObjectManager.sh l c OpenPagesAdministrator <password>
FEED_FOLDER_LOCATION/VRM_SecurityScorecard_8201_Loader_Files/Text/
SecurityScorecard_object_schema_strings_en_US
```

The schema in these files is referenced from the code when loading the Vendor data and *cannot* be modified or renamed. Clients can only rename the labels or add additional fields to these objects.

The schema contains the following field group:

- OPSS-SecurityScorecard Contains fields that are used for the Vendor object type.

Loading registry settings (8.2.0.1)

```
./ObjectManager.sh l c OpenPagesAdministrator <password>
FEED_FOLDER_LOCATION/VRM_SecurityScorecard_8201_Loader_Files/Registry/
SecurityScorecard_registry_entries
```

This file creates all the registry settings that control the behavior of loading SecurityScorecard feeds.

Loading permissions (8.2.0.1)

```
./ObjectManager.sh l c OpenPagesAdministrator <password>
FEED_FOLDER_LOCATION/VRM_SecurityScorecard_8201_Loader_Files/Registry/
SecurityScorecard_permissions
```

Loading the SecurityScorecard entity (8.2.0.1)

This file creates the default business entity hierarchy for the SecurityScorecard data. The SecurityScorecard import expects the following business entity path to exist so that it can create Vendor objects underneath it: BusinessEntity/Library/VRM/VRMLibrary/SecurityScorecard.

Here is the command to load the file:

```
./ObjectManager.sh l c OpenPagesAdministrator <password>  
FEED_FOLDER_LOCATION/VRM_SecurityScorecard_8201_Loader_Files/Schema/  
SecurityScorecard_parent_entity
```

Loading SecurityScorecard system views (8.2.0.1)

This file includes grid and task views for the Vendor object type.

```
./ObjectManager.sh l c OpenPagesAdministrator <password>  
FEED_FOLDER_LOCATION/VRM_SecurityScorecard_8201_Loader_Files/View/ sv-Vendor  
./ObjectManager.sh l c OpenPagesAdministrator <password>  
FEED_FOLDER_LOCATION/VRM_SecurityScorecard_8201_Loader_Files/View/ sv-app-  
string-keys-Vendor
```

Loading the SecurityScorecard job configuration (8.2.0.1)

This file contains the job that can be configured and scheduled to run SecurityScorecard imports. This job will appear on the Schedules UI, which can be used to run the imports manually or through a schedule.

Load the files with ObjectManager:

```
./ObjectManager.sh l c OpenPagesAdministrator <password>  
FEED_FOLDER_LOCATION/VRM_SecurityScorecard_8201_Loader_Files/Schema/  
SecurityScorecard_job_configuration
```

Loading the SecurityScorecard dashboard (8.2.0.1)

```
./ObjectManager.sh l c OpenPagesAdministrator <password>  
FEED_FOLDER_LOCATION/VRM_SecurityScorecard_8201_Loader_Files/View  
VRM_SecurityScorecard_dashboard_views
```

```
./ObjectManager.sh l c OpenPagesAdministrator <password>  
FEED_FOLDER_LOCATION/VRM_SecurityScorecard_8201_Loader_Files/View  
VRM_SecurityScorecard_dashboard_view_string_keys
```

Changes from 8.2.0.3

Follow the steps for manually loading the 8.2.0.3-specific changes in the “Upgrading from an 8.2.0.1 Install” section.

Upgrading from an 8.2.0.1 Install

Loading application strings (8.2.0.3)

```
./ObjectManager.sh l c OpenPagesAdministrator <password>  
FEED_FOLDER_LOCATION/VRM_SecurityScorecard_8203_Loader_Files/Text/  
SecurityScorecard_app_string_keys  
./ObjectManager.sh l c OpenPagesAdministrator <password>  
FEED_FOLDER_LOCATION/VRM_SecurityScorecard_8203_Loader_Files/Text/en-US/  
SecurityScorecard_app_strings_en_US
```

Change the following flags in the ObjectManager.properties file back to false:

```
configuration.manager.vendor.mode = false  
configuration.manager.force.update.object.strings=false  
configuration.manager.force.update.application.strings=false
```

Updating OpenPages profiles with SecurityScorecard fields

In the following sections, we'll walk through the profile configuration and customization for the OPSS-SecurityScorecard field group.

Loading the entire VRM profile automatically

The changes for the library objects should be applied to the client's specific profile. For example, the VRM profile file in VRM_SecurityScorecard_8201_Loader_Files/Schema/VRM_8201_master-profile-op-config.xml contains the default VRM profile that's included in the fresh install with all the above changes. You can load that profile completely by using this command:

```
./ObjectManager.sh b c OpenPagesAdministrator <password>  
FEED_FOLDER_LOCATION/TPRM_SecurityScorecard_8201_Loader_Files/Schema/  
VRM_8201_master-profile
```

Loading the SecurityScorecard profile manually

1. Include the **SecurityScorecard Overall Score (Vendor Filter)** filter
 - o Navigate to **Profiles > OpenPages VRM Master > My Work Tab Configuration > Configured Filtered List**.
 - o Select **SecurityScorecard Overall Score (Vendor Filter)** and click **Next**.
 - o Click **Include** and select the Overall Score field. Click **Finish**.
2. Add the following fields to the Profile for the Vendor object
 - o **Profiles > OpenPages VRM Master > Object Types > Vendor > Object Fields**
 - Industry
 - Average Industry Score
 - Average Industry Grade
 - Application Security Industry Score
 - Cubit Industry Score
 - Network Security Industry Score
 - DNS Health Industry Score
 - Patching Cadence Industry Score

- Endpoint Security Industry Score
- IP Reputation Industry Score
- Hacker Chatter Industry Score
- Information Leak Industry Score
- Social Engineering Industry Score

3. Update the display type and read-only properties for included fields.

Field	Display Type	Read Only
OPSS-SecurityScorecard:Industry	Text	True
OPSS-SecurityScorecard:Average Industry Grade	List	True
OPSS-SecurityScorecard:Average Industry Score	Decimal	True
OPSS-SecurityScorecard:Application Security Industry Score	Decimal	True
OPSS-SecurityScorecard:Cubit Score Industry Score	Decimal	True
OPSS-SecurityScorecard:DNS Health Industry Score	Decimal	True
OPSS-SecurityScorecard:Endpoint Security Industry Score	Decimal	True
OPSS-SecurityScorecard:Hacker Chatter Industry Score	Decimal	True
OPSS-SecurityScorecard:Information Leak Industry Score	Decimal	True
OPSS-SecurityScorecard:IP Reputation Industry Score	Decimal	True
OPSS-SecurityScorecard:Network Security Industry Score	Decimal	True
OPSS-SecurityScorecard:Patching Cadence Industry Score	Decimal	True
OPSS-SecurityScorecard:Social Engineering Industry Score	Decimal	True

Post-install steps

Views

All new views that are loaded are disabled by design. Before you enable them, evaluate what their priority should be with respect to the customer's existing views.

Reporting framework

Because new fields have been added and changed in the OpenPages schema, it's a good idea to regenerate the reporting framework as a post-install step. Note that this step isn't required to run a SecurityScorecard import.

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