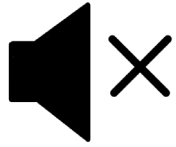

Configure CDGC Scanners with Microsoft SSIS, SSRS and SQL Server Stored Procedures

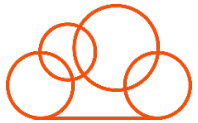
- Srinivasa Gopal, Principal Solutions Architect
- Puneet Dudeja, Principal Solutions Architect

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 on our **INFASupport YouTube channel** and **Success Portal** - where you can download the **slide deck** for the presentation. The link to the recording will be emailed as well.
- Please take time to complete the **post-webinar survey** and provide your feedback and suggestions for upcoming topics.

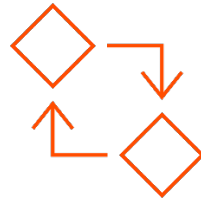
Feature Rich Success Portal



Bootstrap trial and
POC Customers



Enriched Customer
Onboarding
experience



Product Learning
Paths and Weekly
Expert Sessions



Informatica
Concierge



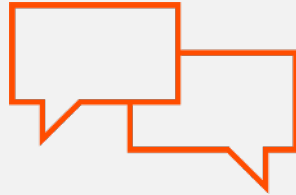
Tailored training and
content
recommendations

More Information



Success Portal

<https://success.informatica.com>



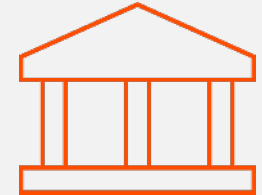
Communities & Support

<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.

Agenda

1

Overview of
Metadata
Command Center
(MCC)

2

SQL Server Stored
Procedure Config

3

SSIS Config

4

SSRS Config

5

Demo

6

Q&A

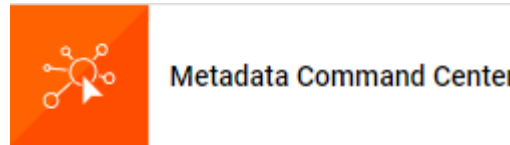
Overview of Metadata Command Center (MCC)

Intelligent Data Management Applications



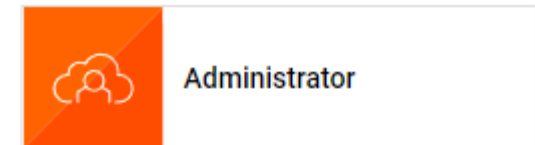
Data Governance and Catalog

- Focused on end User consumption
- All users Contributors, Collaborators and Consumers will be on this App
- Create/Update/Delete/View all activities managed from here



Metadata Command Center

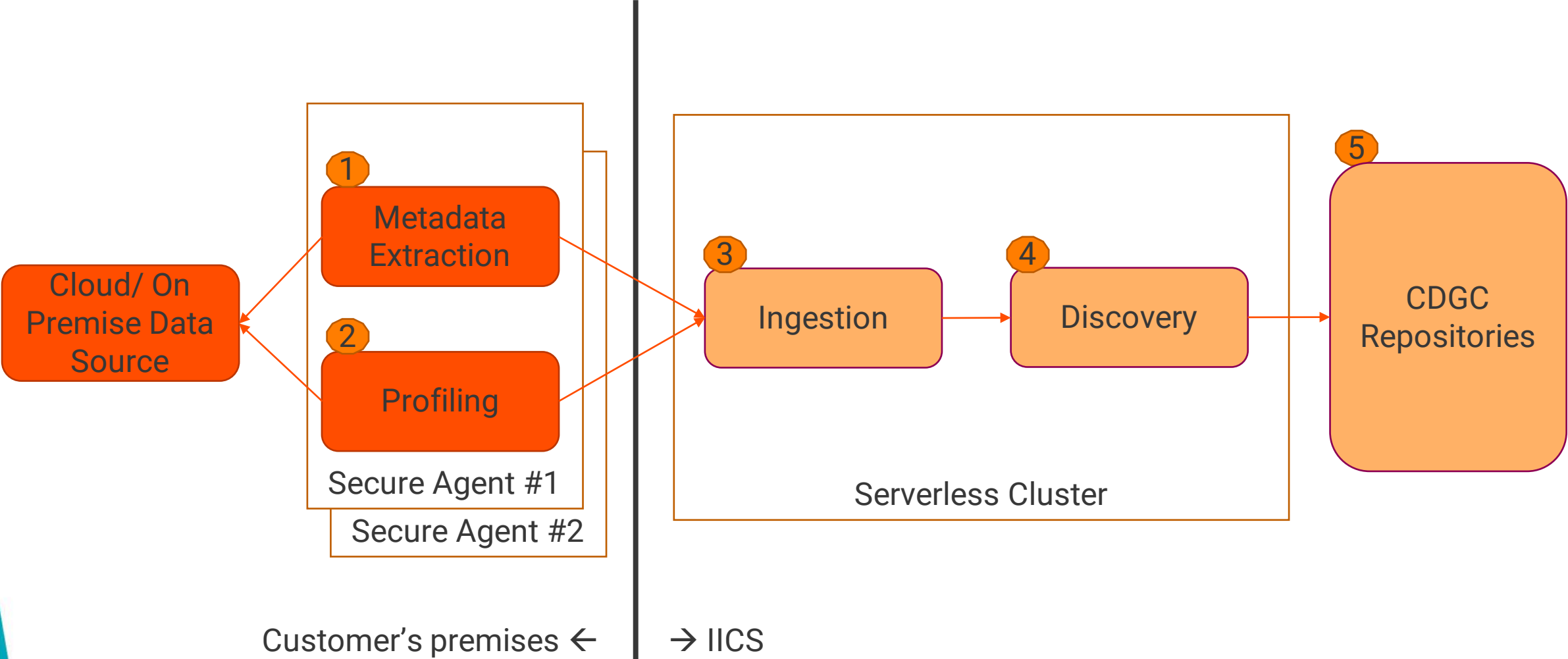
- Focused on Admin Activities for CDGC
- All Admin activities and definition of Data Classifications and adding of New Resources will happen here
- One Admin App for multiple products



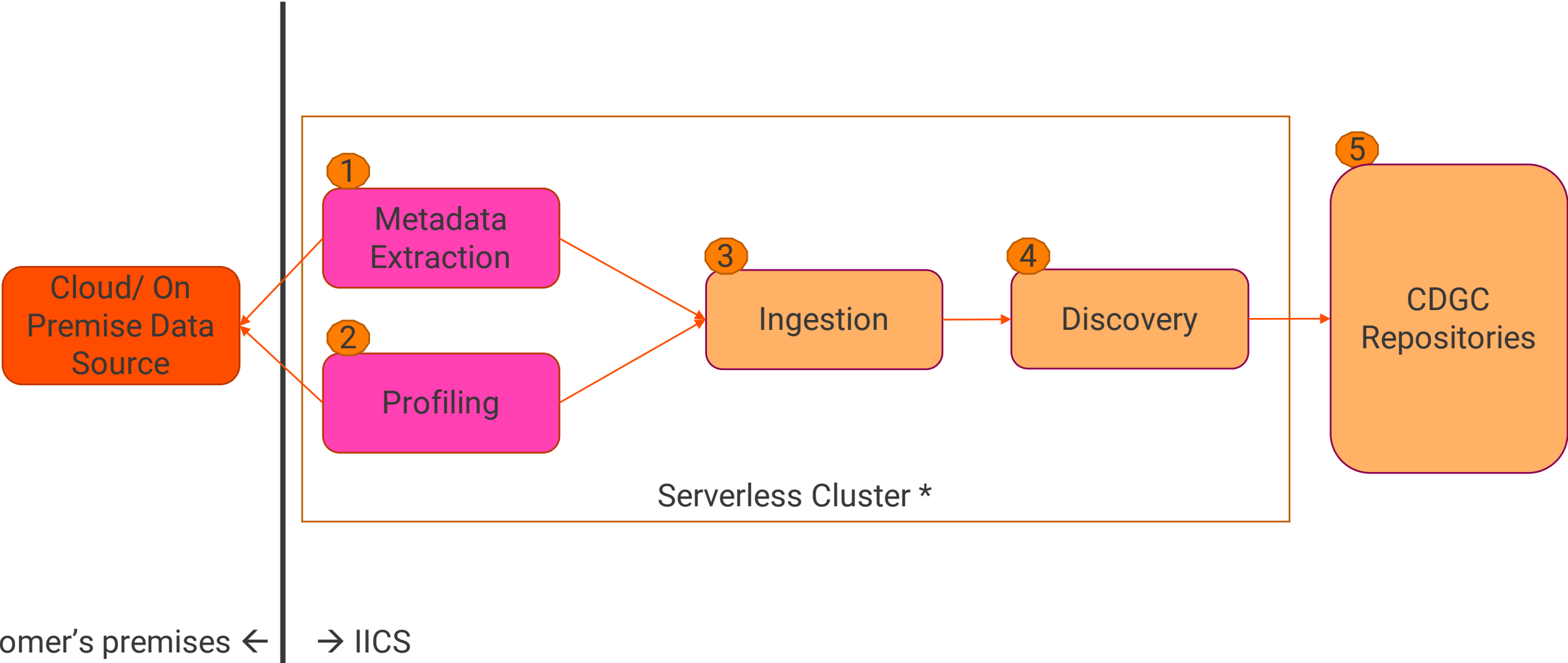
Administrator

- Focused on Admin Activities for IICS
- Users and User Groups
- Define Technical Connections
- Define Agents/Runtime Environments

CDGC Secure Agent based execution



CDGC Serverless Execution



SQL Server Stored Procedures

Pre-Requisites

- Ensure that your organization has the SQL Server connector license and the SqlServerScanner package
- *Establish network connectivity between any port on the machine where you install Secure Agent and the listening port of the Microsoft SQL database. The default port is 1433.*
- *Grant the View Definition permissions and the permissions that you need to perform the following operations on the Microsoft SQL database:*
 - *SELECT ON sys.all_columns*
 - *SELECT ON sys.all_objects*
 - *SELECT ON sys.all_parameters*
 - *SELECT ON sys.database_principals*
 - *SELECT ON sys.databases*
 - *SELECT ON sys.foreign_key_columns*
 - *SELECT ON sys.indexes*
 - *SELECT ON sys.index_columns*
 - *SELECT ON sys.partitions*
 - *SELECT ON sys.schemas*
 - *SELECT ON sys.sql_modules*
 - *SELECT ON sys.synonyms*
 - *SELECT ON sys.tables*
 - *SELECT ON sys.types*
 - *SELECT ON sys.table_types, if your database uses table types.*
- *If you use the dynamic code that consists of solution building queries based on content of the database tables, grant read only access to all the tables that store queries or their components.*

MCC – Configure SQL Server DB

- New...
- Home
- Explore
- Monitor
- Configurations
- Customizations
- MSSQL_SSIS_SS...

MSSQL_SSIS_SSRS_TT

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Save

- 1 Registration
- 2 Configuration
- 3 Filters
- 4 Associations
- 5 Schedule

General Information

Name: * MSSQL_SSIS_SSRS_TT

Description: MS SQL Server Database Scan for TT Demo
Includes Stored Procedure

Connection Information

Metadata Source Type: Microsoft SQL Server

Connection: * MSSQL_SSIS_SSRS_TT

Connection Properties

Runtime Environment:	Puneet_Dudeja_WIN
User Name:	cst_user
Host:	SAPRSSIS
Port:	1433
Code Page:	MS1252
Schema:	dbo
Database Name:	AdventureWorks2019

Test Connection

Metadata Source Type:
Microsoft SQL Server

Configuration

MSSQL_SSIS_SSRS_TT

< Back Next > Save

1 Registration 2 Configuration 3 Filters 4 Associations 5 Schedule

Perform

Select one or more of the following capabilities that you want to configure for the catalog source.

Metadata Extraction Data Profiling Data Classification Relationship Discovery Glossary Association

Metadata Extraction Data Profiling Relationship Discovery

Runtime Environment: Puneet_Dudeja_WIN

Configuration Parameters

Scanner Configuration Options

Process programmable objects: * Yes

To scan Stored Procedures, functions, and packages, Set Process Programmable Objects: "Yes"

Monitoring

Informatica Metadata Command Center Informatica_CST_TEAM

[New...](#)
[Home](#)
[Explore](#)
[Monitor](#)
[Configurations](#)
[Customizations](#)

MSSQL_SSIS_SS...

MSSQL_SSIS_SS...

MSSQL_SSIS_SSRS_TT_Microsoft SQL Ser... STATUS: COMPLETED COMPLETED TASKS: 20 / 20 SUBMITTED TIME: Nov 15, 2022, 02:09:23 PM START TIME: Nov 15, 2022, 02:09:52 PM END TIME: Nov 15, 2022, 02:28:23 PM EXECUTION DURATION: 00:18:31

[Overview](#) [Logs](#)


Job Details

Tasks (20) Find

Name	Submitted Time	Start Time	End Time	Execution Duration	Status
> Metadata Extraction	Nov 15, 2022, 02:09:2...	Nov 15, 2022, 02:09:5...	Nov 15, 2022, 02:28:2...	00:18:31	COMPLETED

Metadata Extraction Details

[Properties](#) [Results](#)

94 CALCULATION	266 COLUMN	1 DATABASE	29 FOREIGN KEY	56 PARAMETER	20 PARAMETER CONTAINER
27 PRIMARY KEY	20 PROCEDURE DEFINITION	20 PROCEDURE INSTANCE	4 RESULT SET	30 RESULT SET COLUMN	4 SCHEMA
31 STATEMENT	36 TABLE	6 TRIGGER	1 UNRESOLVED PROCEDURE DEFINITION	10 VIEW	124 VIEW COLUMN
17 DATA ELEMENT	6 DATA SET	1 REFERENCE RESOURCE	 MSSQL_SSIS_SSRS_TT-2022-11-15-16-12-19.XLSX		

SSIS Config

Pre-Requisites

- Split input into logical applications, and then create a configuration for each logical application. For example, if you split the input into 10 logical applications based on lines of business, create 10 configurations. If a line of business comprises different areas such as treasury or accounting, create separate configurations for those areas also
- Choose one of the following options
 - **File:** *If you store the packages in a database, export the input files together with the corresponding DTSCONFIG, CONMGR, and PARAMS files.*
 - *You export the input files to the server where you previously installed Secure Agent with the **dtutil** utility. You get the utility during the Microsoft SQL Server installation.*
 - *If you store the packages as files in the DTSX format, export the input files from the files system*
 - **SSISDB:** *If SSISDB has the packages deployed, Catalog scanners can connect to it to extract DTSX, CONMGR, and PARAMS files, Refer to the specific permissions in the [link](#)*

Configuration – SSISDB Reader Module

- New...
- Home
- Explore
- Monitor
- Configurations
- Customizations
- SSIS_SSISDB_TT

SSIS_SSISDB_TT

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General Information

Name: * SSIS_SSISDB_TT

Description: Scan SQL Server Integration Service using the SSIS DB Reader Mode to derive Lineage.

Connection Information

Metadata Source Type: Microsoft SQL Server Integration Services

SSIS reader module mode: * SSISDB

Connection: * MSSQL_SSISDB_TT

Connection Properties

Runtime Environment: Puneet_Dudeja_WIN

User Name: Administrator

Host: SAPRSSIS

Port: 1433

Code Page: MS1252

Schema: catalog

Database Name: SSISDB

Test Connection

Metadata Source Type:
Microsoft SQL Server
Integration Services

SSIS Reader Module: SSISDB

Configuration – File Reader Module

- New...
- Home
- Explore
- Monitor
- Configurations
- Customizations
- SSIS_SAPRSSIS_...

SSIS_SAPRSSIS_TT

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Save

- 1 Registration
- 2 Configuration
- 3 Filters
- 4 Associations
- 5 Schedule

General Information

Name: * SSIS_SAPRSSIS_TT

Description: Scan SQL Server Integration Service using the SSIS File Reader Mode to derive Lineage.

Connection Information

Metadata Source Type: Microsoft SQL Server Integration Services

SSIS reader module mode: * ?

Files

Source Directory: * ?

C:\Users\pdudeja\OneDrive - Informatica\Desktop\Working_Docs\SSIS

Metadata Source Type:
**Microsoft SQL Server
Integration Services**

SSIS Reader Module:
Files

Monitoring

- + New...
- Home
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- SSRS - TT - Web ...
- SSIS_SAPRSSIS...

SSIS_SAPRSSIS_TT_Microsoft SQL Server Integration Services_sync

STATUS: **COMPLETED** |
 COMPLETED TASKS: **5 / 5** |
 SUBMITTED TIME: Nov 11, 2022, 02:06:49 PM |
 START TIME: Nov 11, 2022, 02:07:11 PM |
 END TIME: Nov 11, 2022, 02:11:48 PM

Overview | Logs

Job Details

Tasks (5)

Name	Submitted Time	Start Time	End Time	Execution Duration	Status
Metadata Extraction	Nov 11, 2022, 02:06:49 PM	Nov 11, 2022, 02:07:11 PM	Nov 11, 2022, 02:11:48 PM	00:04:37	COMPLETED
Test Connection	Nov 11, 2022, 02:07:29 PM	Nov 11, 2022, 02:07:32 PM	Nov 11, 2022, 02:07:32 PM	00:00:00	COMPLETED
Catalog Source Extraction	Nov 11, 2022, 02:07:29 PM	Nov 11, 2022, 02:07:33 PM	Nov 11, 2022, 02:07:48 PM	00:00:15	COMPLETED
Content Transfer	Nov 11, 2022, 02:07:33 PM	Nov 11, 2022, 02:07:49 PM	Nov 11, 2022, 02:11:48 PM	00:03:59	COMPLETED
Bulk Ingestion	Nov 11, 2022, 02:07:55 PM	Nov 11, 2022, 02:08:12 PM	Nov 11, 2022, 02:11:48 PM	00:03:36	COMPLETED

Metadata Extraction Details

Properties | Results

16

CALCULATION

1

DATA TASK

1

PACKAGE

32

DATA ELEMENT

2

DATA SET

2

REFERENCE RESOURCE



SSIS_SAPRSSIS_TT-2022-11-11-16-07-36.XLSX

Connection Assignment – Establish Lineage Links

- New...
- Home
- Explore
- Monitor
- Configurations
- Customizations

Monitor

Job Monitoring

Connection Assignment

Connections (2)

Unassign



Find

Filter Connection Name: SAPRSSIS.ADVEN... x

Connection Name ↑	Parent Catalog Source	Assigned Catalog Source	Endpoint	Type	Job Status	Objects: ● Matched ● U...	
SAPRSSIS.ADVENTURE...	SSIS_SAPRSSIS_TT	MSSQL_SSIS_SSRS...	dbo	Microsoft SQL Server	COMPLETED View Status	<div style="display: flex; align-items: center;"><div style="width: 100%; height: 10px; background-color: green; margin-right: 5px;"></div>100% (17)</div>	<div style="display: flex; align-items: center;"><div style="width: 0%; height: 10px; background-color: orange; margin-right: 5px;"></div>0% (0)</div>
SAPRSSIS.ADVENTURE...	SSIS_SSISDB_TT	MSSQL_SSIS_SSRS...	dbo	Microsoft SQL Server	COMPLETED View Status	<div style="display: flex; align-items: center;"><div style="width: 100%; height: 10px; background-color: green; margin-right: 5px;"></div>100% (14)</div>	<div style="display: flex; align-items: center;"><div style="width: 0%; height: 10px; background-color: orange; margin-right: 5px;"></div>0% (0)</div>

SSRS Config

Pre-Requisites

- Get a Report Server user with permission to view and download reports and shared data sources from the SSRS administrator. Depending on the scenario, you need to get the Report Builder Role and the Publisher Role or the System User Role.
- **Files Reader Mode:** Use this option to extract metadata from files and directories in the file system. Specify the path to the Report XML files that you want to extract. Verify that the files in the directory are accessible by the Secure Agent. For example, /home/ssrs/*.xml is the source directory on Linux
- **Webservice Reader Mode:** *SSRS Webservice URL, User and Password need to be supplied*
- **Connection Assignment:** *Get database access or extract all necessary database data in one of the following ways*
 - *Get access to all required databases*
 - *Extract structures and definitions of all required database tables, views, and procedures referenced in Microsoft SQL Server Reporting Services. To prepare the extract, use the Metadata Extractor*

SSRS Server Config Manager

Report Server Configuration Manager

Connect

- SAPRSSIS\SSRS
- Service Account**
- Web Service URL
- Database
- Web Portal URL
- E-mail Settings
- Execution Account

Service Account

Specify a built-in account or Windows domain user account to run the report server service.

Report Server Service Account

Choose an option to set the service account and then click Apply.

Use built-in account: Virtual Service Account

Use another account:

Account (Domain\user): **SAPRSSIS\Administrator**

Password: ●●●●●●

Domain Name/ Service Account

SSRS Exporter

Permissions:

Get a Report Server user with permission to view and download reports and shared data sources from the SSRS administrator. Depending on the scenario, you need to get the Report Builder Role and the Publisher Role or the System User Role

Connection Properties:

To connect SSRS exporter tool to the Reporting Server, enter the following parameters:

Reporting Server user name

Reporting Server user password

Reporting Server security domain

The following URL to the ReportService2010.asmx file: **https://<RS domain>/ReportServer/ReportService2010.asmx**

```
{
  "username": "Administrator",
  "password": "",
  "domain": "SAPRSSIS",
  "url": "http://SAPRSSIS/ReportServer/ReportService2010.asmx",
  "includeFilters": [ "/"*"],
  "excludeFilters": [ "" ],
  "targetDirectory": "D:/tmp"
}
```

SSRS Exporter to XML

ssrs-exporter export --jsonFile ssrs.json

```
Administrator: Command Prompt
C:\Users\Administrator>D:
D:\>cd tmp
D:\tmp>ssrs-exporter export --jsonFile ssrs.json
2022-11-15 03:49:19.5996 Running SrsReportService2005 Exporter version: 1.2.202010021402-g72f5b56
2022-11-15 03:49:20.9336 Configuration parameters:
2022-11-15 03:49:20.9346 WebService domain: SAPRSSIS
2022-11-15 03:49:20.9346 WebService url: http://SAPRSSIS/ReportServer/ReportService2010.asmx
2022-11-15 03:49:20.9356 WebService user: Administrator
2022-11-15 03:49:20.9356 WebService password: *****
2022-11-15 03:49:20.9356 Include report path patterns:
2022-11-15 03:49:20.9356 - /SSRS_TT/*
2022-11-15 03:49:20.9356 Exclude report path patterns:
2022-11-15 03:49:20.9356 Exported reports to target directory: D:/tmp
2022-11-15 03:49:20.9366 Will connect to: http://SAPRSSIS/ReportServer/ReportService2010.asmx
2022-11-15 03:49:21.1076 Connected. Items fetched: 7
2022-11-15 03:49:21.1076 Ignoring item: /Data Sources, type: Folder
2022-11-15 03:49:21.1086 Ignoring item: /Data Sources/SQLServer_Source, type: DataSource
2022-11-15 03:49:21.1086 Ignoring item: /SSRS_Testing, type: Folder
2022-11-15 03:49:21.1096 Report will not be included: /SSRS_Testing/Employee_SSRS_TT
2022-11-15 03:49:21.1096 Report will not be included: /SSRS_Testing/Sample_BU_Report
2022-11-15 03:49:21.1096 Ignoring item: /SSRS_TT, type: Folder
2022-11-15 03:49:21.1116 Will save report: /SSRS_TT/SSRS_Report_TT
2022-11-15 03:49:21.1846 > Data source: SQLDataSource
2022-11-15 03:49:21.1846 > ConnectString: Data Source=SAPRSSIS;Initial Catalog=AdventureWorks2019
2022-11-15 03:49:21.2276 > Will write to path: D:/tmp\SSRS_Report_TT.xml
```

Configure SSRS Scanner using File Reader

SSRS_TT < Back

1 Registration 2 Configuration 3 Filters 4 Associations 5 Schedule

General Information

Name: * SSRS_TT

Description: SQL Server Reporting Scanner using File Reader

Connection Information

Metadata Source Type: Microsoft SQL Server Reporting Services

SSRS Reader Mode: * ? Files

Source Directory: * ? C:\SSRS*.xml

Metadata Source Type: Microsoft SQL Server Reporting Services

Provide Path to XML Files where Secure Agent can access

Configure SSRS Scanner using Web Service

Informatica Metadata Command Center Informatica_CST_TEAM

SSRS - TT - Web Service < Back Next > Save

1 Registration 2 Configuration 3 Filters 4 Associations 5 Schedule

General Information

Name: * SSRS - TT - Web Service

Description: SQL Server Reporting Scanner using Webservice

Connection Information

Metadata Source Type: Microsoft SQL Server Reporting Services

SSRS Reader Mode: * ? Web service

Web Service URL: * http://SAPRSSIS/ReportServer/ReportService2010.asmx

Web Service Domain: * SAPRSSIS

Web Service Username: * Administrator

Web Service Password: *

Provide the values as per the SSRS Configuration Manager

Best Practices

- *SSIS Scanner Configuration: SSISDB Reader is preferred approach*
- *SSRS Scanner Configuration: Webservice Reader is preferred approach.
http://<Domain>/ReportServer/ReportService2010.asmx, ensure to use this Syntax for Web Service URL*
- *Filter: Please apply appropriate filters, preferred approach is to start small expand later*
- *Access & Permission: Majority of time is spent in getting appropriate access requests and permissions to establish connection, ensure the Pre-Requisites are met before trying to configure.*
- *Post Successful Scan: Ensure to add sufficient Enrichments, Tagging, Reviews, Certification providing easier navigation to consume.*

Demo

References

[IDMC Security Document](#)

[Metadata Command Center - Config](#)

[SSIS Reader](#)

[SSRS Reader](#)