June 20th, 2023

Best Practices for Implementing Cloud Data Governance and Catalog

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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 <u>Success Portal</u> 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.









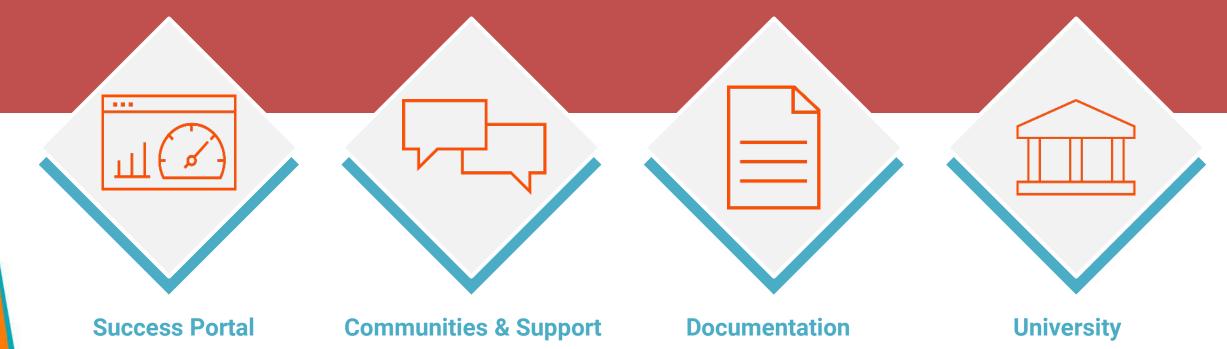


Bootstrap trial and POC Customers

Enriched Customer Onboarding experience Product Learning Paths and Weekly Expert Sessions Informatica Concierge Tailored training and content recommendations



More Information



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Technical Considerations



Account Verification and Services Screen

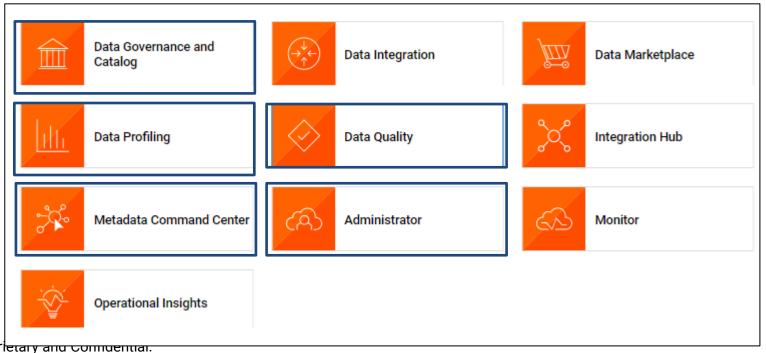
Welcome Email

Welcome to the Informatica family! We are so glad that you're here! Before you can dive into the great features we have to offer, please verify your account:

Verify me now

You have 48 hours to verify your account. If the link expires, please click here to get a new account confirmation email.

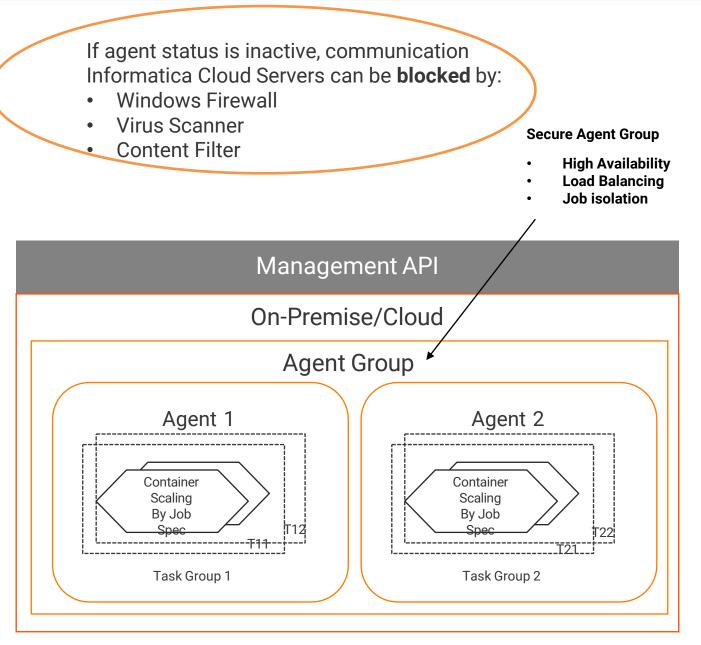
Services Available



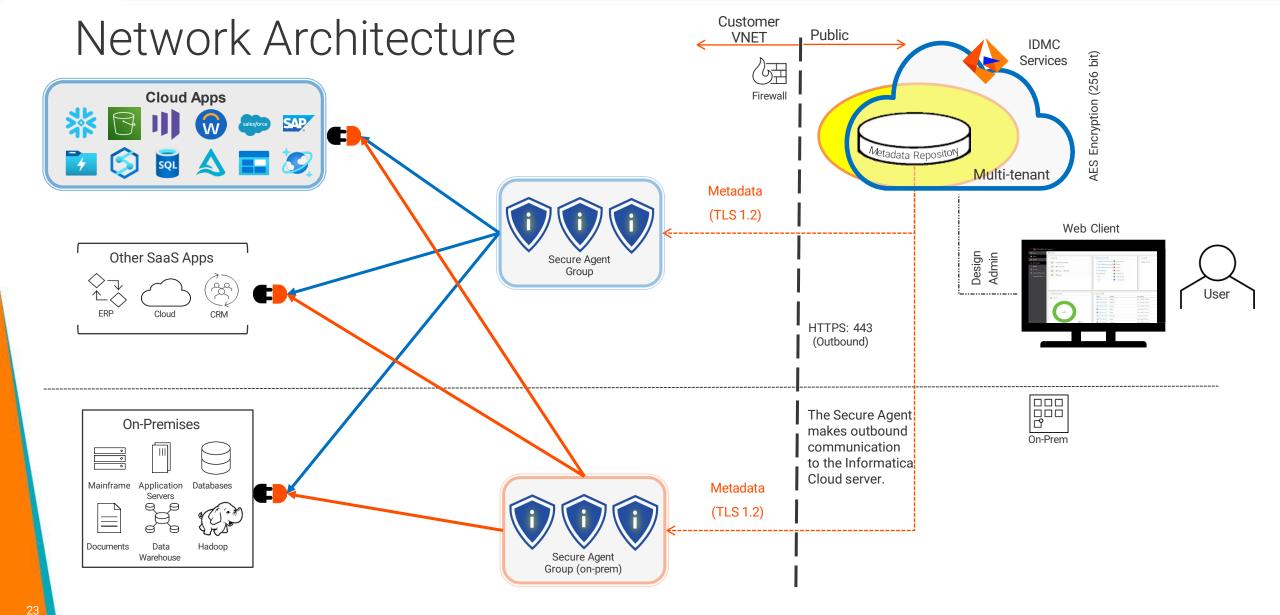
Secure Agent Sizing

Requirements for CDGC

- Recommended Prerequisites
 - 16 CPU cores
 - 64 GB RAM
 - 200 GB HDD
 - SSD disks are strongly recommended
- Easy to deploy
 - Download and install the secure agent
 - Register agent using generated token
- Scale with IDMC agent grouping capabilities
 - 2 or more SA for sources more than 100k assets
- <u>All agents can execute all the capabilities (Sizing</u> <u>Guidelines)</u>
 - Metadata extraction
 - Profiling
- How To: <u>Plan Secure Agent(s) with Best Practices</u>







- Only metadata and profile results are sent back to Informatica Cloud
- For metadata in IDMC, Administrator can restrict to view Sensitive Data & Profile Statistics



Secure Agent Connectivity

Onor	Snowflake - LoanVantage_Snowflake_sync	N== 0.0000.11.10.50.111	N= 0 0000 44-50-44 AM	No. 0 0000 44 57 00 414	00.07.47		
Oper	Showhake - Loanvantage_Showhake_sync	Mar 8, 2023, 11:49:50 AM	Mar 8, 2023, 11:50:11 AM	Mar 8, 2023, 11:57:28 AM	00:07:17	COMPLETED	
	Upload-TEST-CL-0001(1).xlsx_import	Mar 8, 2023, 10:19:29 AM	Mar 8, 2023, 10:19:42 AM	Mar 8, 2023, 10:25:24 AM	00:05:42	COMPLETED	
1. T	Snowflake Test_Snowflake_sync	Mar 8, 2023, 09:36:45 AM	Mar 8, 2023, 09:37:07 AM	Mar 8, 2023, 11:16:44 AM	01:39:37	FALLED	
	Snowflake Test_Snowflake_sync	Mar 7, 2023, 10:52:52 AM	Mar 7, 2023, 10:53:35 AM	Mar 7, 2023, 10:59:13 AM	00:05:38	COMPLETED	
2 T	* Snowflake Test_Snowflake_sync	Mar 1, 2023, 10:28:47 AM	-	-	-	FAILED	
2. 1	* Snowflake Test_Snowflake_sync	Mar 1, 2023, 09:57:22 AM	-	-	-	FALLED	
	* Snowflake Test_Snowflake_sync	Feb 27, 2023, 02:53:55 PM	-	-	-	FAILED	
This	Rowflake Test_Snowflake_sync	Feb 27, 2023, 02:33:55 PM	 Job do 	esn't initiali	ze	FALLED	ces can connect to IICS
oorvo	Snowflake Test_Snowflake_sync	Feb 27, 2023, 02:14:01 PM	-	-	-	FALED	
serve	* Snowflake Test_Snowflake_sync	Feb 27, 2023, 02:06:07 PM	-	-	-	FALLED	
	Snowflake Test_Snowflake_sync	Feb 27, 2023, 01:55:57 PM	-	-	-	FALED	
	Tenant Repair for 01_DISCOVERY_PROD-Quarantine	Feb 13, 2023, 08:37:13 PM	Feb 13, 2023, 08:37:45 PM	Feb 13, 2023, 08:38:10 PM	00:00:25	COMPLETED	
	Tenant Repair for 01_DISCOVERY_PROD-Quarantine	Feb 13, 2023, 08:09:25 PM	Feb 13, 2023, 08:09:52 PM	Feb 13, 2023, 08:10:20 PM	00:00:28	COMPLETED	
	Model Publish for core.discovery.lookuptables	Jan 20, 2023, 12:59:58 PM	Jan 20, 2023, 01:00:26 PM	Jan 20, 2023, 01:01:18 PM	00:00:52	COMPLETED	
	E Import Predefined Content	Jan 20, 2023, 12:58:14 PM	Jan 20, 2023, 12:59:14 PM	Jan 20, 2023, 01:13:07 PM	00:13:53	COMPLETED	

Base IICS Services

ccgf-orchestration-dispatc	Task group: metadataExtraction with tasks: (Metadata Extraction) tenant: Customer Name 01CCNP080000000003 Show Less	
ccgf-task-launcher	Deploying task: bf8aba78-638e-44ad-9aab-2a6b5a472083 got response Failed to deploy task. Please contact informatica support "failed to deploy task"	
ccgf-task-launcher	Encrypted task with ID: 2cfaf843-0e9d-4015-9635-c03255c1686d.7bd67961-059a-40b8-a17a-c21dcef759f0.bf8aba78-638e-44ad-9a	

Cloud Data Profiling



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Secure Agent Configuration | Concurrent Jobs

Update maxDTMProcesses to increase number of concurrent mapping tasks

Connection Type	Formula to set value	Example on 16 CPU Server
File-based or ODBC connections	0.75 * Number of logical CPUs	0.75 * 16 = 12
Cloud data warehouse or cloud data lake connectors	0.33 * Number of logical CPUs	0.33 * 16 = 5

Service	Туре	Sub-type	Name	Value
Data Integration Server 💙	Tomcat 🗸	~	maxDTMProcesses	12

Secure Agent Configuration | Memory



Additional memory for metadata scanning Increase maxHeap_size

Custom Configuration Details

Service	Туре	Sub-type	Name	Value
Metadata Foundation Ap 🗙	PLUGIN_CFG V	~	maxHeap_size	16384



Agent-wide virtual memory for all IICS Services INFA_MEMORY

Out of the box it's 512m Must be set **at least** to 2048M '-Xms512m -Xmx8192m -XX:MaxPermSize=384m'

Service:	Data Integration Server	~	
ype:	Tomcat JRE	\checkmark	
Туре		Name	Value
Tomcat JRE		INFA_SSL	
Tomcat JRE		INFA_MEMORY	'-Xms32m -Xmx512m'
Tomcat JRE		JRE_OPTS	'-Xrs'
Tomcat JRE		JAVA_LIBS	



Memory on the Mapping level

JVMOption1

Improve performance Reduce writing to disk '-Xmx8192m'

System Configuration Details Reset All					
Service:	Data Integration Server 🗸 🗸				
Туре:	DTM 🗸				
Туре	Name	Value			
DTM	JVMClassPath	pmserversd			
DTM	JVMOption 1	'-Xmx8192 n			
DTM	JVMOption2				
DTM	JVMOption3				



Don't Forget to Import Pre-Defined Content

🔶 Informatica Metadata Command Cent	× P ¹ B ?
Explore	Import Predefined Content
Data Classifications	♦ Informatica Metadata Command Center Informatica ∨
A Data Classifications	
🗰 Relationship Inference Model 🛛 🖉 Explore	
Lookup Tables ABA Routing No	Import Predefined Con STATUS COMPLETED TASKS SUBMITTED TIME Sep 10, 2022, 08:42:26 AM Sep 10, 2022, 08:43:22 AM Sep 10, 2022, 08:43:22 AM Sep 10, 2022, 08:50:39 AM
Lookup Tables	Start Subscription Start S
Lookup Tables ABA Routing No	Overview Logs

Data Classifications (215)			
Name †	Туре	Description	Sensitivity
🖉 Ukraine Passport Domestic	Data Element	Classifies column metadata and data values as Ukra	HIGH
🚇 Ukraine Passport International	Data Element	Classifies column metadata and data values as Ukra	HIGH
🖉 United Kingdom Unique Taxpayer Refe	Data Element	Classifies column metadata and data values as Unit	HIGH
및 URL	Data Element	This matches URL patterns. Example values are : inf	-
및 USA City	Data Element	Classifies metadata with US city and US city values t	-
및 USA County	Data Element	Classifies data with the county names for US	-
Q USA Driving License	Data Element	Classifies column metadata and data values as USA	MEDIUM
🖉 USA Individual Tax Identification Num	Data Element	Classifies metadata and data with USA ITIN column	HIGH
Q USA National Provider Identifier Stand	Data Element	Classifies column metadata and data values as USA	-

Description
List of US zin onder
List of 03 zip codes.
List of US States.
List of US state codes.
List of US counties.
List of US cities.

Column Similarity Model v1.0						
General Info	General Information					
Name:	Name: Column Similarity Model v1.0					
Description:	A model that discovers column similarity relationships within a catalog source based on the similarity between the names as well as the content of the columns.					
Published By:	Informatica					

Import Data Quality Bundles with Pre-Built Content

Add-On Bundles

Installed Bundles

Copied Bundles

3

Available Bundles

2

	0			
	Oraa	nizat	ION	

Informatica Ad

🛃 licenses

(1)

SAML Setup

Metering

Y Settings

Users 👪 User Groups

User Roles

Runtime Environm..

Serverless Environ.

Connections

Add-On Connectors

31 Schedules

Data Services Rep...

Add-On Bundles

Swagger Files

🔒 Logs

Advanced Clusters

File Servers

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Available Bundles (5 items found)					[data quality
Name	Description	Publisher	Version	Bundle Type	Last Published	
Cloud Data Quality Automation B	With this release, Informatica makes available an Informatica Cloud Data Quality Au	DQ Content Team	1.0	Public	Jun 1, 2020, 2:36:16 AM	
Cloud Data Quality Crisis Respon	The Crisis Response Accelerator can help you find and fix errors and inconsistencies i	DQ Content Team	1.2	Public	Oct 14, 2020, 4:32:00 AM	
Data Quality Americas Bundle	The Data Quality Americas Bundle is a set of pre-configured data quality assets that y	DQ Content Team	2.0	Public	Jan 25, 2022, 7:25:38 AM	
Data Quality Financial Bundle	Use the Financial Bundle to verify and enhance data from organizations in the financi	DQ Content Team	1.0.1	Public	Feb 7, 2023, 12:06:13 AM	
Data Quality GBR Bundle	The Data Quality GBR Bundle is a set of pre-configured data quality assets that you c	DQ Content Team	1.1	Public	Feb 15, 2023, 2:27:51 AM	

Name	Description	Туре
c_dq_Validate_County	Validates if a given input is a valid US county.	Cleanse
mplt_Assign_DQ_Mailability_Score_Description	This mapplet provides a brief description or meaning for the Mailability Score. Tags: Accuracy	Mapplet
c_SSN_Max_Index_For_Group	Returns index for a group.	Cleanse
p_Parse_Name_Components_FML_USA	Parses input into First Name, Middle Name, Last Name for USA.	Parse
mplt_CAN_Phone_Number_Parse	This mapplet parses a phone number that follows the standard format for Canada from a string of text	Mapplet
p_Assign_Firstname_Gender_Can	Assigns gender on the basis of Firstname for Canada	Parse
dedupe_US_IMO_Indiv_Name_Address_Match	Matches individual name and address with Address Part1 as key.	Deduplicate
usa_company_names_std_infa	This reference table contains list of company name standards in US.	Dictionary
mplt_BRA_Company_Suffix_Standardization	Mapplet standardizes the company suffix if one is present. Tags: Brazil, Corporate, Integrity/Conform	Mapplet
v_USA_Validation_Discrete_Address	Verifies US address in discrete format.	Verifier
rs_Title_Case	Converts given input to titlecase.	Rule Specification
mplt_USA_Phone_Number_Validation	This mapplet validates the area code for US phone numbers. Quality scores are: 0 - NULL or blank in	Mapplet



10ne numbers. Quality scores are: 0 - NULL or blank in.

Cheeta Metadatan Gerananbgestan Settre to see if Sconnie Reidon is required in Administrationator Service

		Data Integration	
Azure Azure SQL DB Azure Synap Azure ADLS Gen 2 Azure Blob	ose	Cloud Data Integration owerCenter Microsoft SSIS Talend	BI & Analytics Tableau PowerBI SSRS QlikView Qlik Sense
Data Factory	New Catalog Source		Cognos Microstrategy Looker
	Registration Cont General Information	nguration (3) Associations (4) Schedule	
On-premises	Name: *	Enter the Catalog Source Name	AWS
Oracle SQL Server IBM E MySQL Teradata Postgr JDBC Netezza MongoDB	Description:		AWS S3 AWS Redshift SRDS (Oracle, MS SQL Server,
Local/Shared Filesyster	Connection Information	Snowflake	eSQL and MySQL) AWS Athena DynamoDBI
	Connection: *		
Google & OCI		CDL/DW	Applications SAP BW SAP BW/4HANA SAP ECC SAD S/4HANA SAP PO SAD HANA DB
Google BigQuery GCS Oracle ADB	Sn	owflake DW Databricks Delta Tables	SAP S/4HANA SAP BO SAP HANA DB Salesforce Marketo Dynamics CRM Workday Informatica MDM B360



Roles and Responsibilities



Why are you using CDGC?

What was the deciding factor for wanting to start/bring data governance to the next level

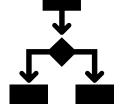
Need to think about how the program wants users to interact with the solution and in what ways they may want to operationalize it.

Will there be a heavy data privacy, data quality, or master data management focus? Will priorities be split between multiple areas?

Preliminary Considerations What needs to be done for the program to be functional?

What operations need to be completed?





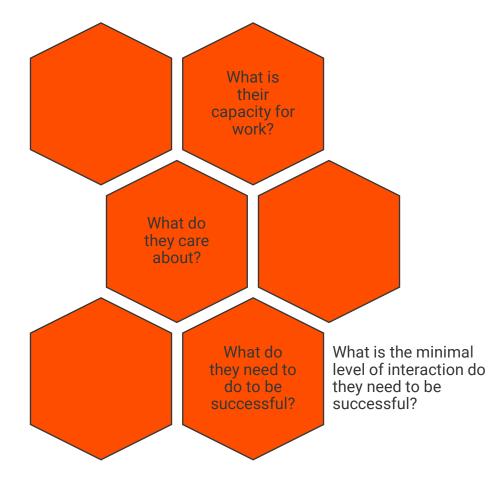
What is your current team's strengths and weaknesses?

Does your company already have a data first culture?



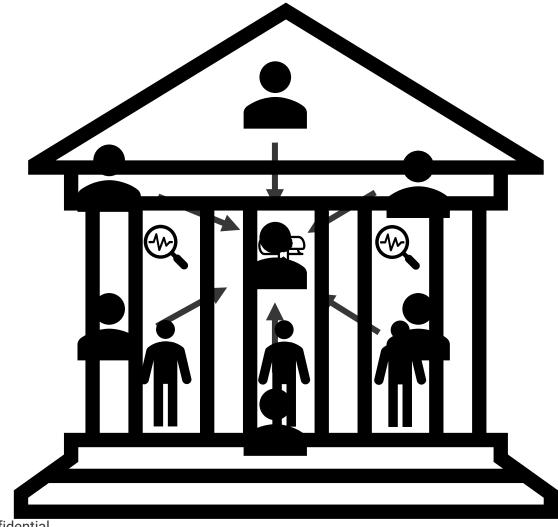
Preliminary Considerations

Who will be the primary stewards and owners?



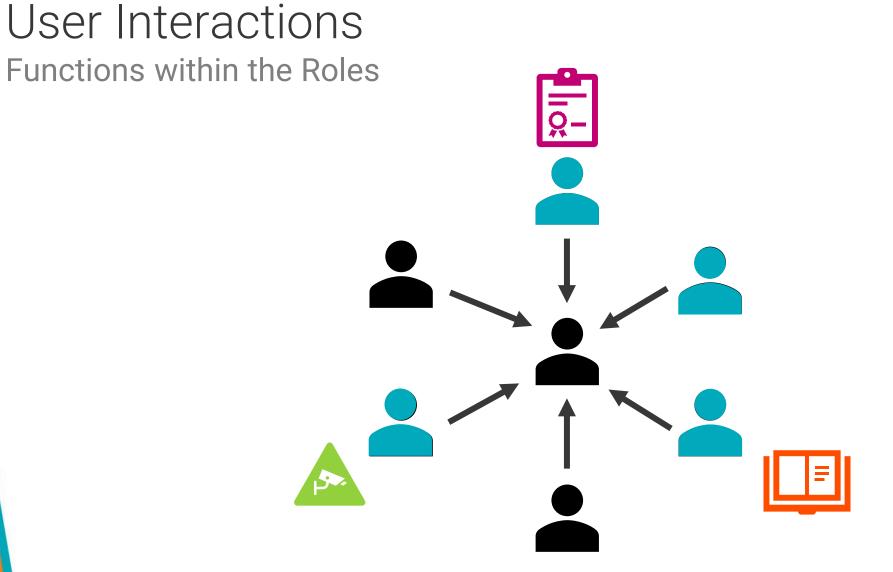


User interactions





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Catalog Data Steward

Communicates technical workings of data, fosters the goal of data re-use, and designs policies and processes to improve the underlying integrity of information to the organization. Responsible for uploading and curating catalog assets.

Asset Permissions

Services: Metadata Cor	mmand Cer	nter	-			
Assets Features						
Asset Type	Create	Read	Upd	Delete	Run	Set Permi
Al Model		~				
Application Options						
Business Reports		~				
Business Term		~	~			
Catalog Source Configura						
Consumer Access						
Custom Catalog Source Ty						
Custom Models						
Data Categories						
Data Collection Orders						
Data Collections						
Data Quality		~				
DataSets	~	~	~			
Delivery Targets						
Delivery Templates						
Glossary Domain	~	~	~			
Glossary SubDomain	~	~	~			
Metric	~	~	~			
Policy		~				
Process						
System	~	~	~			
Technical Assets	~	~				

MCC Permissions

Services:	Metadata Command Center	•	
Assets	Features		
Feature Na	ime	Enabled	
Access Met	tadata Command Cen	~	
Manage A	ccess Control		
Manage Co	onnection Assignments	~	
Manage Co	ustom Attributes	~	
Manage Da	ata Classifications	~	
Manage Re	eference Data	~	
Manage Sy	vstem Settings		
Manage W	orkflow Settings		
Monitor Job	os		
View Custo	m Attributes	~	
View Data (Classifications	~	
View Refere	ence Data	~	

CDGC Permissions

ervices:	Data Governance and Catalog 📼	J
ssets	Features	
Feature Na	ime	Enabled
Access Dat	a Governance And C	~
Curate Auto	omatic Glossary Assoc	~
Curate Date	a Classifications	~
Export		~
Import		~
Participate i	in Change Approvals	~
Stakeholde	rship	~
View Busine	ess Assets	~
View Data	Classifications	~
View Profile	ed Stats	~
View Sensit	ive Data	~
View Techn	ical Assets	~
View Unpu	blished Content	~

Workflow Inbox

Services:	Human Tasks	•
Assets	Features	
Feature N	ame	Enabled
View Task	S	



Governance Data Steward

Responsible for working with business and technical stakeholders to ensure high levels of data quality, integrity, availability, trustworthiness and security. Creates and curates business assets.

Asset Permissions

Metadata Cor	mmand Cer	nter	*			
Assets Features						
Asset Type	Create	Read	Upd	Delete	Run	Set Permi
Al Model		*				
Application Options						
Business Reports	~	~	~			
Business Term	~	~	~			
Catalog Source Configura						
Consumer Access						
Custom Catalog Source Ty						
Custom Models						
Data Categories						
Data Collection Orders						
Data Collections						
Data Quality		~				
DataSets	~	~	~			
Delivery Targets						
Delivery Templates						
Glossary Domain		~	~			
Glossary SubDomain		V	~			
Metric	~	~	~			
Policy	~	~	~			
Process	~	~	~			
System						
Technical Assets		~				

CDGC Permissions

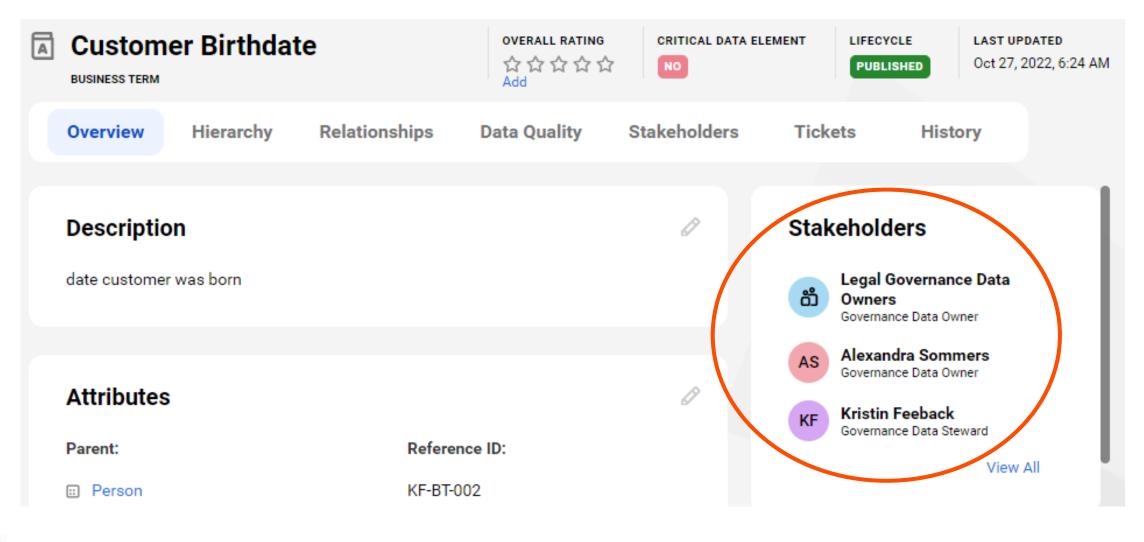
Services:	Data Governance and Catalog		
Assets	Features		
Feature Na	ime	Enabled	
Access Date	a Governance And C	V	
Curate Auto	omatic Glossary Assoc	✓	
Curate Date	a Classifications	✓	
Export		✓	
Import		✓	
Participate i	in Change Approvals	~	
Stakeholde	rship	✓	
View Busine	ess Assets	✓	
View Data	Classifications	✓	
View Profile	ed Stats	~	
View Sensit	ive Data	~	
View Techn	ical Assets	~	
View Unpul	blished Content	~	

Workflow Inbox

Services:	Human Tasks	•
Assets	Features	
Feature N	ame	Enabled
View Task	S	

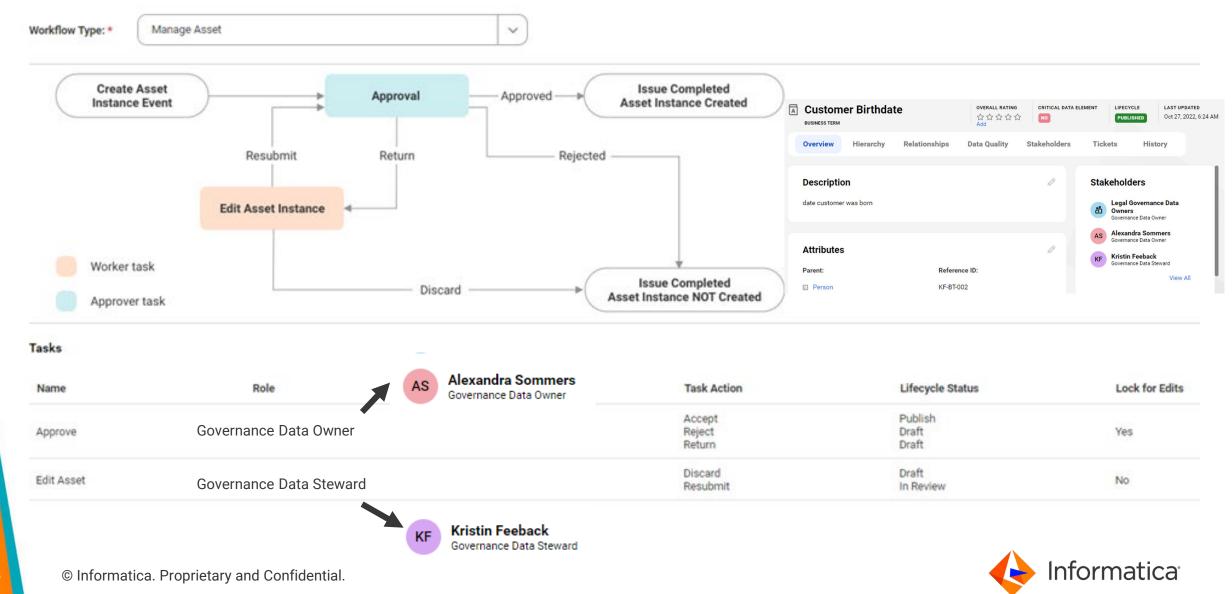


Role Interactions





Role interactions



Foundation Design



Foundation for the Future



CDGC's strength for the glossary lies in depth of information and its relationships.



CDGC should be kept in a standard model to maximize use and growth.



Keep in mind that the use case is just giving you the first set of information to input information.



Harder to change the model once the use case information is built out.

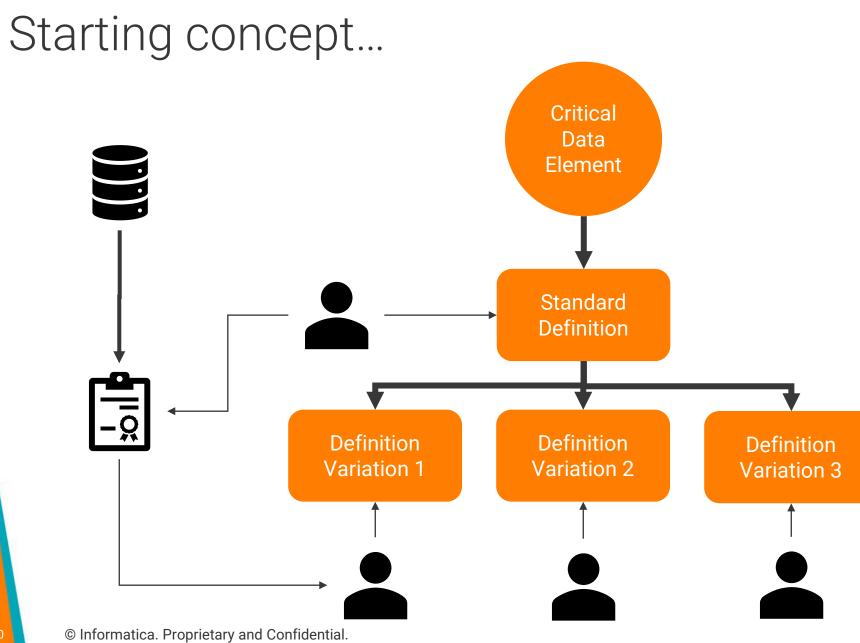


Where do things belong?



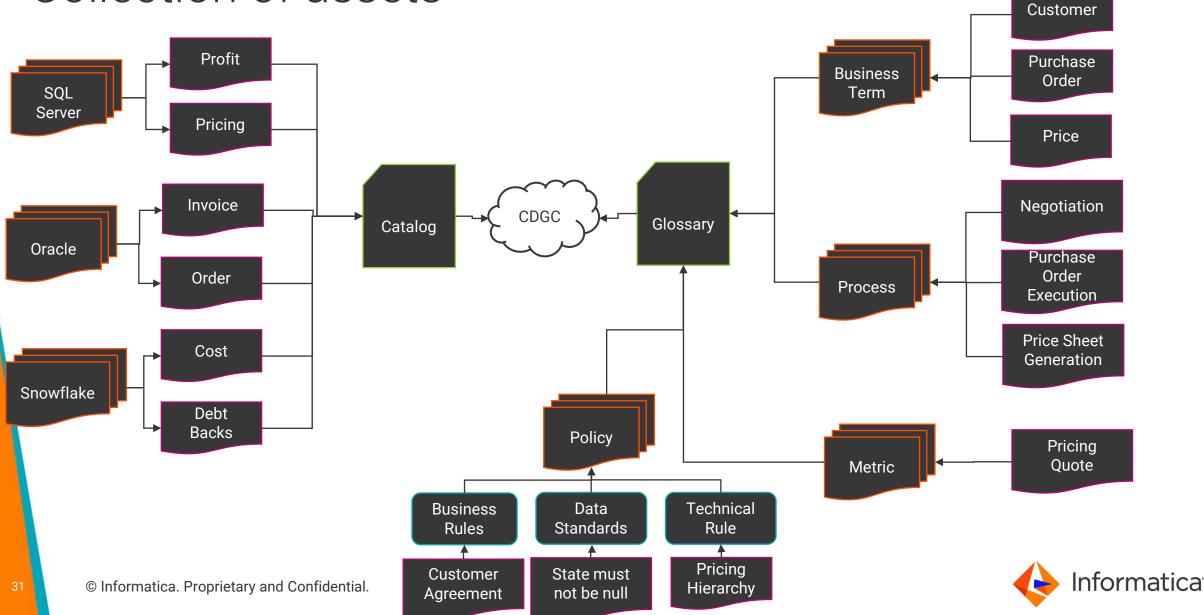
Finding the start...







Collection of assets



Data Quality within CDGC



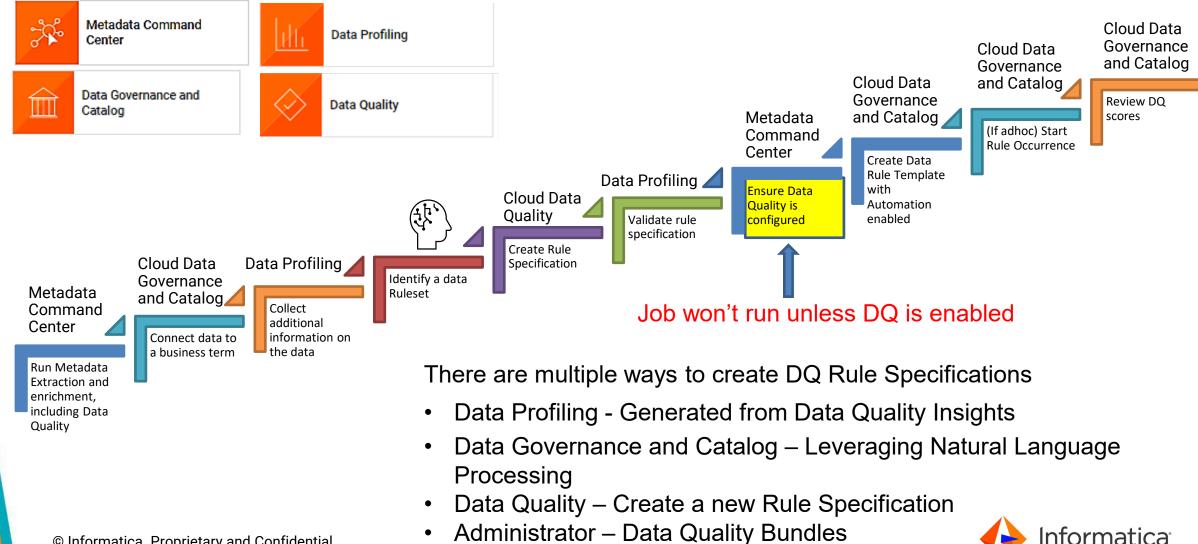
Data Governance and Catalog After Enrichment

Profiling, Classification, Glossary Association, Relationship Discovery

Overview	Contains Lineage	Relationships Dat	ta Quality Stakeholders	Properties	Tickets History		
Data Elem	ents (10)					T	Find 😵
# ↑	Name	Туре	Glossaries	Classifications	CLAIRE" Re Null Dist	inct Non-Distinct % Source Data	Type Inferred Data Type
1	CUSTOMER_ID	Column	Party ID			VARCHAR2	Date (28.00%) +4
2	PARTY_NAME	Column				VARCHAR2	String (100.00%)
3	d ADDRESS_LINE1	Column		Address		VARCHAR2	String (68.00%)
4	d ADDRESS_LINE2	Column		Address		VARCHAR2	String (74.00%)
5	d ADDRESS_LINE3	Column		Address		VARCHAR2	
6	đ ADDRESS_LINE4	Column		Address +1		VARCHAR2	Integer (76.00%) +3
7	ē city	Column	City	City		VARCHAR2	String (100.00%)
8	PROVINCE	Column				VARCHAR2	Integer (22.00%) +2
9	DOSTAL_CODE	Column	Postal Code	Postal Code		VARCHAR2	String (99.00%)
10	E COUNTRY	Column	Country	World Cities +1		VARCHAR2	Fixed Length String (100.00



Informatica Cloud Data Governance and Catalog **Data Quality Process**



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Metadata Extraction - Data Quality/DQ Enabled

	1 Registration 2 Configuration 3 Associations 4 Schedule
	Metadata Extraction Data Profiling and Quality Data Classification Relationship Discovery
Metadata Extraction Data Profiling and Quality Data Classification Relationship Discovery Glossary Association	Data Profiling
Enable Metadata Extraction:	Data Quality
Runtime Environment: Informatica Managed Infrastructure X	Enable Data Quality: Use Data Profiling Parameters
Filters	Connection and Runtime
Specify metadata filters.	Runtime Environment:
> Show supported wildcard characters and examples	Parameters
Include Metadata v Database.Schema v Named v (ABC.* ×)	Data Quality Automation: *
Configuration Parameters	Cache Result: * Agent Cache Agent Cache · Apply on all
Process programmable objects: *	Sampling Type: *
Default variables values: 🕥	No of rows to limit: *
	Mapping Submission Timeout: ²⁰ ²⁰ Sampling options based or source
	Maximum Precision of String Fields: 50 • All Rows Description of String Fields: 50 • Limit N Rows Description of String Fields: 50 • Compared to the string Field String Fie
	 Text Qualifier: * O Double Quote Custom Query

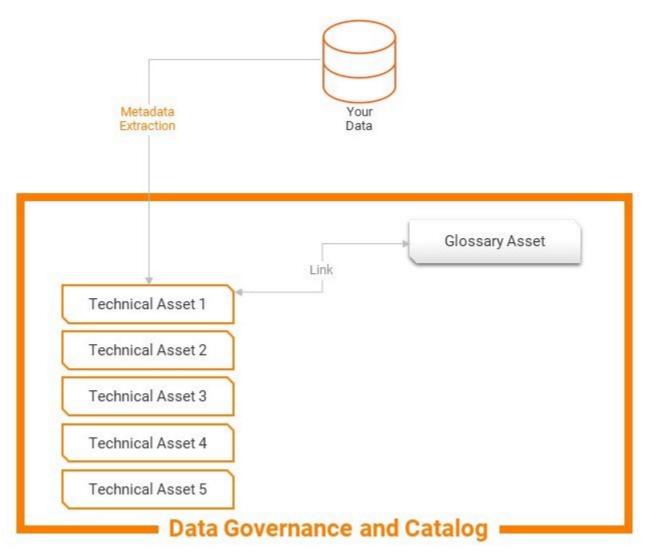


-Co

Metadata Command

Center

Associate Technical Asset to Business Term





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A

State BUSINESS TERM

Overview

Name

Hierarchy

Relationships

6 All 4 Column 1 Data Quality Rule Template 1 Subdomain

Data Quality

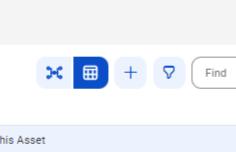
Column (4) Туре How It Is Related Data Quality Rule Template (1) Subdomain (1) o→ ☐ STATE Linked Glossary this Asset Reference Column STATE o→ ☐ STATE Linked Glossary this Asset Reference Column f STATE o→ ⊗ State Name Completeness applies to this Asset State Name Completeness Data Quality Rule Template o→ ☐ STATE Linked Glossary this Asset Reference Column 0 STATE o→ ☐ STATE Linked Glossary this Asset Reference Column 8 STATE o→ ¹ Postal Address is the Parent of this Asset Postal Address Subdomain

Tickets

History

Stakeholders

Business Term Associated to Four Columns 俞 Data Governance and Catalog



Data Profiling – Create Connection and Run Profile



		matica [.] Data Profiling	-0										Independent Financial 🗸
	🕀 New	• 📊	Profile_Test										Save Run
	Explore	Definit	ition Rules	Schedule									
	My Jobs	At	sset Details							Source Deto	aila		
	My Import/Ex	xport logs		01 7							on: Snowflake Test		
	Profile_Test			ofile_Test						Connectio			
ling Task	Frome_lest		Description:							Source O	bject: ACCOUNT		
										T Fact	le CLAIRE capabilities 🛛 🚱		Advanced
			Location: De	efault Folder					Browse				
										Profile Settin	ngs		
-										Run profil	e on: All rows for complete analysis 		
											() First	rows	
											O Random sample	rows	
		<u>⊆</u>	olumns Filters										
			elect columns to run the	e profile on. (Selected 1									↓↑▼ Find
			Columns	/EV	Type NSTRING		Native Do	ita Type	Precision 4000		Scale	Nullable	Key Yes
							varchar		4000		0		Tes
							warehar		50		0		
is Definition Rules Sc	chedule Insichts			UMBER	NSTRING		varchar varchar		50		0		
is Definition Rules Sc ew: Columns and Rules	chedule Insights • hith: All Statistics			UMBER	NSTRING		varchar	Find	10				
-				UMBER	NSTRING	% Non-dis	varchar	 Find Find Find 	10	Minimum Le.	0		
ew: Columns and Rules	▼ with: All Statistics		ACCOUNT_N ACCOUNT_T	NUMBER YPE	NSTRING NSTRING	% Non-dis	varchar		10		0 Detoils Rules	Trend	% Change
ew: Columns and Rules Columns	▼ with: All Statistics		ACCOUNT_N ACCOUNT_T	NUMBER YPE	NSTRING NSTRING	% Non-dis 0%	varchar		10		0 Details Rules Trend Type	Trend	% Change
ew: Columns and Rules Columns Columns	▼ with: All Statistics	▼ % Null	 ACCOUNT_N ACCOUNT_T # Null 	NUMBER YPE % Distinct	NSTRING NSTRING # Distinct		varchar ↓↑ i # Non-dis	ti # Patterns	10 J % of Top Pe	a Minimum Le.	0 <u>Details</u> Rules Trend	Trend	% Change
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ew: Columns and Rules Columns Columns Columns CUSTOMER_NUMBER BRANCH_NUMBER BRANCH_NAME FULL_NAME FULL_NAME KIDDLE_NAME LAST_NAME INDIVIDUAL_INDICATOR INDIVIDUAL_DESCRIPTION	All Statistics Value Distribution	 % Null % Null 0% 	ACCOUNTIN ACCOUNTIN ACCOUNTIN MUI MUI MUI O	NUMBER YPE % Distinct % Distinct 100% 10% 87.2% 46.2% 20.8% 67.1% 0.2%	NSTRING NSTRINO # Distinct 1000 100 872 462 208 671 2 2 2	0% 90% 90% 12.8% 53.8% 79.2% 32.9% 99.8%	varchar ↓ 1 # Non-dis 0 900 900 128 538 792 329 998 998	# Patterns 2 2 7 1 7 3 6 1 2	10 % of Top Pr 99% 93.1% 41.4% 100% 27.7% 64.6% 30.6% 100% 76.2%	7 2 4 7 1 1 2 1 2 1 2 2	o <u>Details</u> Rules ▼ Trend Type Null Distinct Non-distinct ▼ Data Types (2)	•	

Collect Information & Create Rule Set

Child_0

is greater than

No rule statement is valid

2

and

or if



lts (Definition Rules	Schedule	Insight	5						
iew: A	ll Insight Types	🔹 in:	All Colu	umns		•				✓ × ♡ □ Hide Rejected Insights
	Insight Statement							Score	Insight Type	Columns
	The length of the data val	ues in the colu	mn has c	a high stan	dard deviation.			Medium	Column Length Deviation	STREET_ADDRESS2
	The number of tokens in t	he column has	a high st	tandard de	eviation.			Medium	Column Token Deviation	STREET_ADDRESS2
	The length of the data val	ues in the colu	mn has c	a high stan	dard deviation.			High	Column Length Deviation	MIDDLE_NAME
	The number of tokens in t	he column has	a high si	tandard de	eviation.			Low	Column Token Deviation	MIDDLE_NAME
	The data may contain spe	ecial character:	5					Low	Special Characters	MIDDLE_NAME
	Numeric values found ou	tside the 95% :	standard	deviation	range.			Low Number Value Distribution		FEDERAL_WITHHOLD_CODE
	The length of the data val	ues in the colu	nn has c	a high stan	dard deviation.			High Column Length Deviation		CELL_PHONE2
	The number of tokens in t	he column has	a high st	tandard de	eviation.			High	Column Token Deviation	CELL_PHONE2
	The length of the data val	ues in the colu	mn has c	a high stan	dard deviation.			Low	Column Length Deviation	FEDERAL_WITHHOLD_DESC
	The number of tokens in t	he column has	a high st	tandard de	eviation.			Low	Column Token Deviation	FEDERAL_WITHHOLD_DESC
	The length of the data val	ues in the colu	mn has c	a high stan	dard deviation.			Medium Column Length Deviation ZIP_CODE		ZIP_CODE
	The number of tokens in t	he column has	a high s	tandard de	eviation.			Medium Column Token Deviation ZIP_CODE		
	The length of the data val	ues in the colu	mn has c	a high stan	dard deviation.			Low Column Length Deviation FIRST_NAME		
	The number of tokens in t	he column has	a high si	tandard de	eviation.			Low Column Token Deviation FIRST_NAME		FIRST_NAME
	The length of the data val	ues in the colu	nn has c	a high stan	dard deviation.			Medium	Column Length Deviation	STATE_NAME
	The data may have incon	sistent spelling.						High	Spelling Analysis	STATE_NAME
		Test _	or	1F	Child_0	is greater than or equal to	9	then	Valia	
			or	1	Child_U	is greater than or equal to	·	then	Invalia	



'Valid'

Do Nothing

龠

then



Create the Business Rule

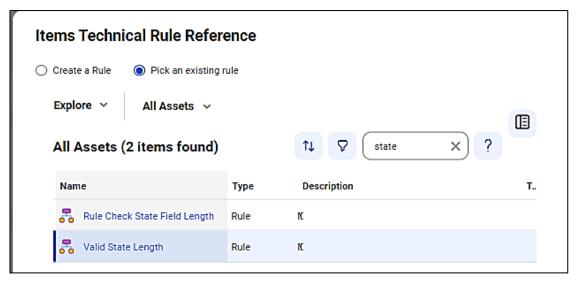
Create, Test, and Save a Rule Specification

Open the Data Quality Service

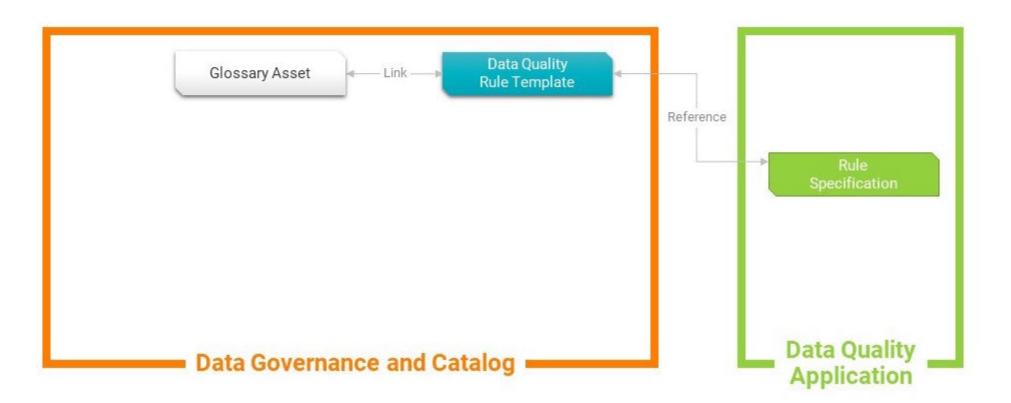
Ne	w			\otimes
Sele	ect the type of asset you wa	int.		
	Rule Specification	Dictionary	Verifier	Cleanse
	Deduplicate	Parse	Labeler	
	A A B B		500	

In the Data Quality Service, this appears under "Pick an existing rule"

•	🔒 Valid State	Length					Defi	ne Action		
	Definition	Configuration	n							
	▶ Design 🛛									
							Ac	tions	Find	
	Properties: Pri	imaryRuleSet	0							
	General	Rule logic o	definition)	Merge		
	Inputs	G.		Input	Operator	Condition	- ,	Input		
	Rule Logic	Г Ļ	ił.	in_State_Name Result of # 1	is not is less than or equal to	NULL 4	-	Functions		
	Test	or	if	Kesuli or # 1	No rule statement is valid	*				
							- ,	 Standardi; 	ze	
)	Convert C	ase	
)	Rules		
)	 Mapplets 		
)	Expression	ns	



Associate Rule Template to Glossary & Rule Specification





Data Quality Rule Template and Natural Language

Processing



Data Quality Rule Template

State Name Comp	leteness	
Name: * 🙆	State Name Completeness	
Description: 🕢	$H_{1} B I \underline{\cup} \oplus i \equiv \equiv \equiv \equiv = \oplus \boxtimes "$	
	Enter a description for the rule template.	
Reference ID: 🚱	Enter a unique identifier for the asset. If left blank, the Reference ID is automatically generated.	
Dimension: *	Completeness	~
Measuring Method: *	Business Extract	~
Primary Glossary: *	State	×≡
Secondary Glossary:		≡
Technical Rule Reference: *	Valid State Length	×≡
Criticality:		~
Automation:		
Target: *	35	
Threshold: *	90	\$
Frequency: 🕥	Daily	× •

Items Technical Rule Reference		
Create a Rule Pick an existing rule		
Describe the rule 📵	CLAIRE" Recom	mendations
State Name must not be less than 4 characters	Select to view det	ails and create a new rule:
	IF Length(Stat	te) >= '4' THEN TRUE
	CLAIRE" will	I generate and attach the following rule:
	Rule Name	BT_Stat_Com_May_27_2023_133543
	Description	This is a CLAIRE [*] generated rule based on the description State Name must not be less than 4 characters
Click here to use the description from the rule template	Input	State
View Recommendations		

NLP texts to consider

You can use the following types of NLP rule descriptions. If the text you enter is insufficient or unclear, CLAIRE® might recommend rephrase the rule description that you rephrase the rule description

Empty Value Rules

The following examples show descriptions of null value rules that CLAIRE® NLP technology can read:

- Sum may be NULL
- keep the section field empty
- Box value should be nullified
- Title should be Nothing Blank values are equal to null

Non-Empty Value Rules

The following examples show descriptions of rules that are not null values that CLAIRE® NLP technology can read:

- Age is always NOT NULL
- Name field cannot be blank or empty
- RFID values is not Null
- Radius must not be blank or empty
- doc number is not NULL

Comparison Rules

The following examples show descriptions of comparison rules that CLAIRE® NLP technology can read:

- Down payment number is greater or equal to thousand
- Down payment is going to either be 1000 or be above 1000
- Value cannot be less than 1,000

NLP texts to avoid

Avoid the following types of NLP rule descriptions. If the text you enter is insufficient or unclear, CLAIRE® might recommend that you

Double Negation Sentences

The following examples show descriptions of double negation sentences that CLAIRE® NLP technology cannot read:

- · It is not defined city name to be not null
- Distance is not equal to or lesser than NOT NULL
- Date of birth cannot be not null
- · It is not acceptable for Phone Number to be not NULL

Complex Sentences

The following examples show descriptions of complex sentences that CLAIRE® NLP technology cannot read:

- It's not acceptable for date to equal NULL
- Nothing should be populated in name field
- · Joining Date should not contain the value of date but contains numbers
- Product is not equal to 2 or not larger than 1

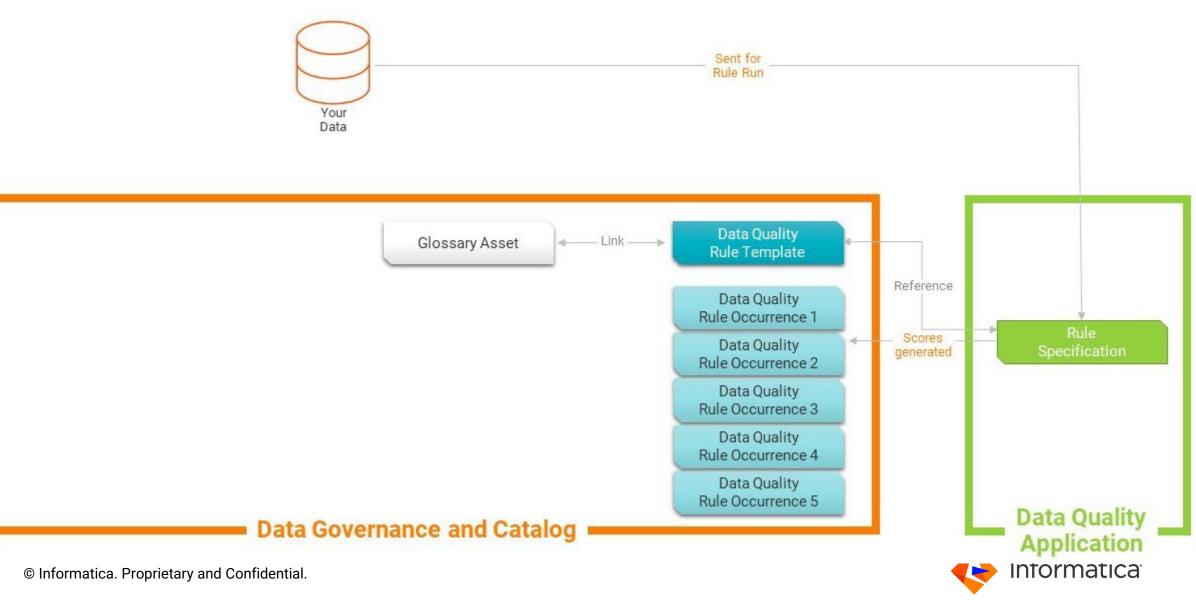
Grammatically Incorrect Sentences and Incorrect Spellings

The following examples show descriptions of grammatically incorrect sentences and incorrect spellings that CLAIRE® NLP technology cannot read:

- First name should be \$NULL
- Serial cannot contain numerics
- Last_name is not a number and alphasnumeric
- Product is nt equal to or nt larger then 1



Automate Rule Occurrence Generation



Automate Rule Occurrence Generation

Auto-STATE-Completeness-State Name Completeness

Auto-STATE-Completeness-State Name Completeness

Completeness

Completeness



LIFECYCLE PUBLISHED

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Postal Code - Completeness

Party ID - Completeness

Country - Completeness

Party ID - Completeness

Postal Code - Completeness

State Name Comp DATA QUALITY RULE TEMPLATE	Netelless															
							Top Level									
Name: * 🚱	State Name Completeness	S					⊘ State N	Name Cor	npleteness							
Description: 🕲	HIBIUS HE							RULE TEMPLATE								
	Enter a description for the	rule template.					Overview	Rule Occ	urences Stak	eholders 1	Tickets	History				
							Descripti	tion								0
Technical Rule Reference: *	Valid State Length				×=)		Confirms if t	the State Name	has at least 4 charac	ters						
Criticality:					~											
Automation:							Primary Glos	ossary:					Secondary Gloss	Sary:		0
					,	r										
ata Quality Rule Automa	tion				×		Reference ID	D:					Occurences:			0
You have selected automation for the	rule template. This will create rule oc	courrences for the data elements th	hat are associated with the p	primary glossary. After you	save the rule template, you		DQT-2						4 Rule Occurence	es		
				Ye	s No											
State Name Com Data QUALITY RULE TEMPLATE				Ye					_							OVEBALL RATING 수승수수수 Add
		Tickets History		Ye	CRM_CUSTOME		Relationships	: Data Qual	ity Stakeholde	rs Propertie	s Ticket:	s History				
DATA QUALITY RULE TEMPLATE	rences Stakeholders	Tickets History		Ye		s Lineage		: Data Qua	ity Stakeholde	rs Propertie	s Ticket:	s History	Rules Against Ta	arget		
DATA QUALITY RULE TEMPLATE Overview Rule Occur Dimensions Latest S	rences Stakeholders	Tickets History		Ye	CRM_CUSTOME Trace Overview Contains Dimensions Latest	s Lineage	Relationships Validity (3)	Data Qual	ity Stakeholde	rs Propertie	s Tickets	s History	Good	arget Consistency (2)		
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DATA QUALITY RULE TEMPLATE Overview Rule Occur Dimensions Latest S Completeness (4)	rences Stakeholders	Tickets History		Y	CRM_CUSTOME Tass Overview Contains Dimensions Latest Consistency (2) Com	s Lineage	Validity (3)	5 Data Qua	ity Stakeholde	rs Propertie	s Tickets	s History	 Good Acceptable 	Consistency (2) Completeness (3)	1 2 Count	
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Auto-COUNTRY-Completeness-Country -... Completeness

Auto-POSTAL_CODE-Completeness-Pos... Completeness

Auto-CUSTOMER_ID-Completeness-Part... Completeness

May 28, 2023, 5:4... -

May 27, 2023, 1:3...

100%

99%

• 100%

Dec 19, 2022, 1:3... 100

Oct 10, 2022, 9:0... 100

Oct 7, 2022, 4:35 ... 100

COUNTRY

0

POSTAL_CODE

CUSTOMER_ID

Managing the Data Quality Automation Process

Driven by Metadata Command Center and Data Governance and Catalog

isAutomated option on rule templates in Data Governance and Catalog	Data quality option in Metadata Command Center	Data quality automation option in Metadata Command Center	Result
Yes	Yes	Yes	Create rule occurrences for all data elements that are associated with glossary business assets.
Yes	Yes	No	 Does not create new rule occurrences for data elements or update an existing rule occurrence on data elements. Does not affect the execution of the existing rule occurrences in Data Governance and Catalog
Yes	No	Not applicable	 Does not create any rule occurrences for data elements. Data quality execution stops for existing rule occurrences that are associated with assets of a particular catalog source.
No	Yes	Yes	 Does not create rule occurrences for data elements. Does not affect the execution of the existing rule occurrences in Data Governance and Catalog

