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Difference between Identity Attribute and Display Attribute

Many of the people were confusing and infect I was also bit confused regarding the Identity Attribute and Display Attribute in application configuration (Schema). I just want to give some clarity. Please let me know if I am wrong. Let's get start.
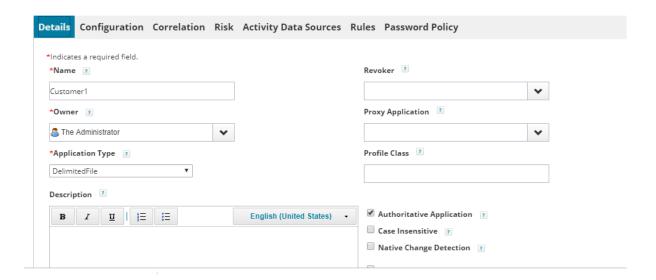
Let's talk about Identity Attribute first,

The **Identity Attribute** is used to take or pick up the unique data from the application which is to be onboarding to get the unique identities with link of the application. If it contains duplicate data in the attribute value's list, then it will take last/latest value creates the link object of the application to the identity only. Rest of the duplicated identities will be aggregated but the link of the application to the identities will not be created. Consider following sample to data for better understanding, Assume **Customer1.csv** which contains CNumber, CName, Ccountry attributes. In the CNumber we have duplicate CNumber values "67254". CNumber (67254) is same for Menno.Peters, Paul.Mayer and Nitesh,Kunwar. If we aggregate, we will get Nitesh.Kunwar identity with link of Customer1 application. Rest of the duplicate identities will create identity without creating link of the application to the identities. As shown in below. **Note: This is a required field.**

CNumber	CName	Ccountry
10983	Aravind.Golla	India
18753	Juhe.Begam	Pakistan
23254	Karanam.Karthik	Germany
99355	Rajesh.Illa	Germany
67254	Menno.Peters	USA
67254	Paul.Mayer	SA
67254	Nitesh.Kunwar	India

Now, we will be onboarding the application by specifying the CNumber attribute as the Identity Attribute as show in the below diagrams.

Edit Application Customer1

Details **Configuration** Correlation Accounts Risk Activity Data Sources Rules Password Policy

Settings Schema Provisioning Policies

Add Object Type

Object Type: account

File Filtering Merging Iteration Partitioning

* **File Path** ?

F:\sailpointwork\files\Customer1.csv

File Encoding ?

File Transport ? ◉Local ○FTP ○SCP

Parsing Type ?
◉Delimited ○Regular Expression

Delimiter ?
,

☑ File has column header on first line ?
☐ Fail on column length mismatch ?

Columns ?

Test Connection

Edit Application Customer1

Details **Configuration** Correlation Accounts Risk Activity Data Sources Rules Password Policy

Settings **Schema** Provisioning Policies

Object Type: account

Details

Native Object Type

account

Identity Attribute

CNumber

☐ Include Permissions

Display Attribute

CName

Instance Attribute

Remediation Modifiable

Readonly ▼

Attributes

	Name	Description	Type	Properties	
☐	CNumber		string ▼		⚙ Edit
☐	CName		string ▼		⚙ Edit
☐	Ccountry		string ▼		⚙ Edit

Add New Schema Attribute **Discover Schema Attributes** **Delete Schema Attribute**

Preview

Aggregate the application, you will see the results as follows. Identities created 7.

Task Result

Details			
Name	Customer1 Account aggregation	Started By	The Administrator
Type	Account Aggregation	Started	9/30/19 3:19:55 PM
Description	Task template for application account scanning.	Completed	9/30/19 3:20:07 PM
Run Time	0:00:12	Average Run Time	0:00:00
Run Time Change	0%	Host	LAPTOP-5E7MC3NR
Status	✔ Success	Progress	Completed

Return to Tasks

Attributes	
Attribute	Value
Applications scanned	Customer1
Accounts scanned	7
Identities created	7

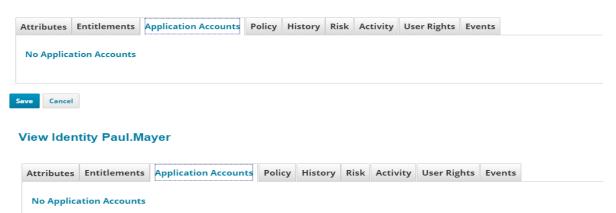| Application	Account	Action	Identity	Attribute
Customer1	10983	Create	Aravind.Golla	
Customer1	18753	Create	Juhe.Begam	
Customer1	23254	Create	Karanam.Karthik	
Customer1	99355	Create	Rajesh.Illa	
Customer1	67254	Create	Menno.Peters	
Customer1	67254	Create	Paul.Mayer	
Customer1	67254	Create	Nitesh.Kunwar	

But if we see the application accounts, we can have only 5 accounts has been created under the application instead of 7 since we have in task results because rest of two accounts are duplicated. Identity Attribute will exclude those duplicate values and will take latest/last value and aggregate the identity with link of application.

Edit Application Customer1

Details Configuration Correlation **Accounts** Risk Activity Data Sources Rules Password Policy

Filter by Name

Account ID ▲	Account Name	Status	Last Refresh	Identity Name
10983	Aravind.Golla ▼	● Active	9/30/19	Aravind.Golla
18753	Juhe.Begam ▼	● Active	9/30/19	Juhe.Begam
23254	Karanam.Karthik ▼	● Active	9/30/19	Karanam.Karthik
67254	Nitesh.Kunwar ▼	● Active	9/30/19	Nitesh.Kunwar
99355	Rajesh.Illa ▼	● Active	9/30/19	Rajesh.Illa

Page 1 of 1 Show 25 items Displaying 1 - 5 of 5

View Identity Menno.Peters

Attributes Entitlements **Application Accounts** Policy History Risk Activity User Rights Events

No Application Accounts

Save Cancel

View Identity Paul.Mayer

Attributes Entitlements **Application Accounts** Policy History Risk Activity User Rights Events

No Application Accounts

Save Cancel

View Identity Nitesh.Kunwar

| Attributes | Entitlements | Application Accounts | Policy | History | Risk | Activity | User Rights | Events |

Application Accounts

	Application	Account Name	Status	Last Refresh
☐	Customer1 ⌃	Nitesh.Kunwar	● Active	Sep 30, 2019

Details for Application Account Nitesh.Kunwar   ✕

    CName Nitesh.Kunwar
    CNumber 67254
    Ccountry India

[Delete] [Move Account]

[Save] [Cancel]

Hope you understand the importance of Identity Attribute clearly.

It's time to know the usage Display Attribute,

The **Display Attribute** is used for used as the object name as it appears throughout the IdentityIQ application and which done default correlation based on it which attribute do we specify over there.
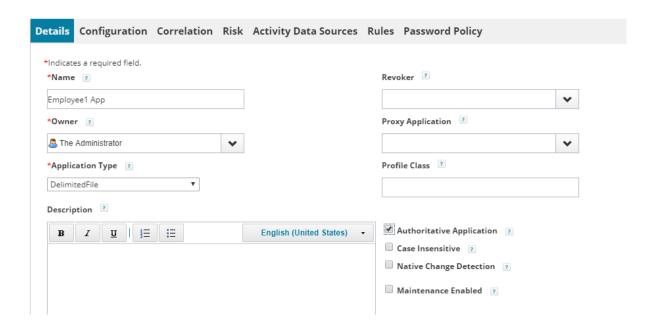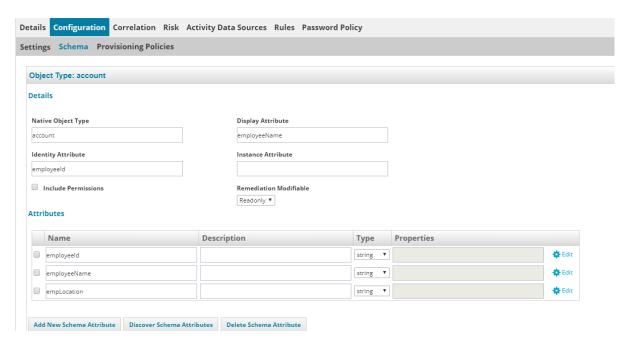
Let's try to understand with some examples.

Let's onboard the application Employee1 which by specifying "employeeName" as the Display Attribute and run the account aggregation as follows.

Employee1.csv

employeeId	employeeName	empLocation
201	Rohit.Sharma	Hyd
202	Virat.Kolhi	Krl
203	Dhoni.Ms	Che
204	Dhoni.Ms	MH

Edit Application Employee1 App

| Details | Configuration | Correlation | Risk | Activity Data Sources | Rules | Password Policy |

*Indicates a required field.

*Name ?

Employee1 App

*Owner ?

👤 The Administrator ⌄

*Application Type ?

DelimitedFile ▼

Description ?

| **B** | *I* | U | ☰ | ☰ | English (United States) ▾ |

Revoker ?

⌄

Proxy Application ?

⌄

Profile Class ?

☑ Authoritative Application ?
☐ Case Insensitive ?
☐ Native Change Detection ?
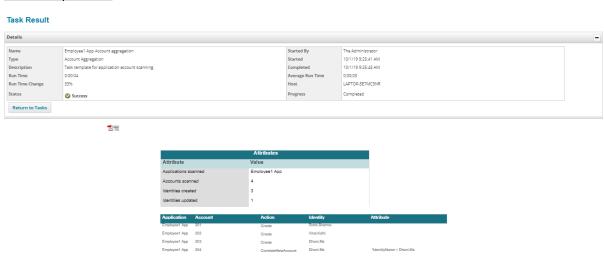☐ Maintenance Enabled ?

In correlation, not selected account correlation and not correlation rule also. Run the account aggregation task by enabling Detect deleted accounts and Disable optimization of unchanged accounts options.

See the results,

Accounts scanned :4

Identities created :3

Identities updated :1

If we observe the above result screenshot, we can able find 201 (Rohit.Sharma), 202 (Virat.Kohli), 203 (Dhoni.Ms) were created. 204 (Dhoni.Ms) was not created newly. It is CorrelateNewAccount with Dhoni.Ms because the identity which contains Dhoni.Ms was created before it (specified employeeName attribute in Display Attribute). So, it is correlating. By this we can come to know based on attribute what we specify in display attribute. Make sense or not?

Observe below screenshots.

View Identity Virat.Kolhi

Attributes	Entitlements	**Application Accounts**	Policy	History	Risk	Activity	User Rights	Events

Application Accounts

	Application	Account Name	Status	Last Refresh
☐	Employee1 App ⌃	Virat.Kolhi	● Active	Oct 1, 2019

Details for Application Account Virat.Kolhi ✕

empLocation Krl
employeeId 202
employeeName Virat.Kolhi

[Delete] [Move Account]

View Identity Rohit.Sharma

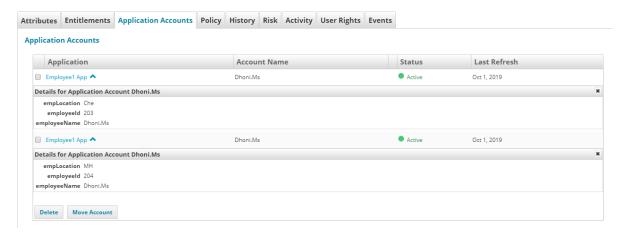| Attributes	Entitlements	**Application Accounts**	Policy	History	Risk	Activity	User Rights	Events

Application Accounts

	Application	Account Name	Status	Last Refresh
☐	Employee1 App ⌃	Rohit.Sharma	● Active	Oct 1, 2019

Details for Application Account Rohit.Sharma ✕

empLocation Hyd
employeeId 201
employeeName Rohit.Sharma

[Delete] [Move Account]

View Identity Dhoni.Ms

Attributes	Entitlements	**Application Accounts**	Policy	History	Risk	Activity	User Rights	Events

Application Accounts

	Application	Account Name	Status	Last Refresh
☐	Employee1 App ⌃	Dhoni.Ms	● Active	Oct 1, 2019

Details for Application Account Dhoni.Ms ✕

empLocation Che
employeeId 203
employeeName Dhoni.Ms

	Application	Account Name	Status	Last Refresh
☐	Employee1 App ⌃	Dhoni.Ms	● Active	Oct 1, 2019

Details for Application Account Dhoni.Ms ✕

empLocation MH
employeeId 204
employeeName Dhoni.Ms

[Delete] [Move Account]

Cool, let's try in another way for getting clarity on whether correlation is going to be done identity attribute or display attribute.
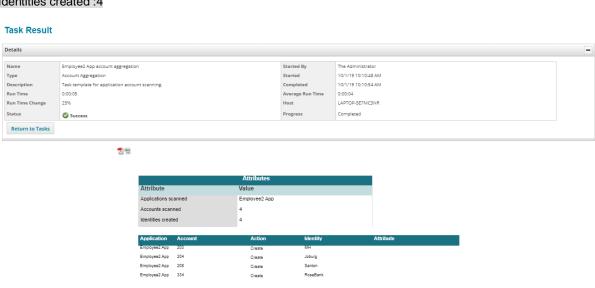
Consider Employee2.csv

employeeId	employeeName	empLocation
203	Dhoni.Ms	MH
204	Adharsh.Katte	Joburg
208	Amar.Nath	Santon
334	Karthik.Kota	RoseBank

Let's configure the application. But just consider here, select Identity Attribute as employeeID and Display Attribute as empLocation and run the aggregation task.

See the results,

Accounts scanned :4

Identities created :4

Task Result

Details				
Name	Employee2 App account aggregation	Started By	The Administrator
Type	Account Aggregation	Started	10/1/19 10:10:48 AM
Description	Task template for application account scanning.	Completed	10/1/19 10:10:54 AM
Run Time	0:00:05	Average Run Time	0:00:04
Run Time Change	25%	Host	LAPTOP-5E7MC3NR
Status	✅ Success	Progress	Completed

Return to Tasks

Attributes	
Attribute	Value
Applications scanned	Employee2 App
Accounts scanned	4
Identities created	4

Application	Account	Action	Identity	Attribute
Employee2 App	203	Create	MH	
Employee2 App	204	Create	Joburg	
Employee2 App	208	Create	Santon	
Employee2 App	334	Create	RoseBank	

By this result we can come to know the correlation is not going to be done based on Identity Attribute because mentioned in schema Identity Attribute as employee. 203, 204 were already present in IIQ, so should not create new one. It should simply correlate and gives the results like this
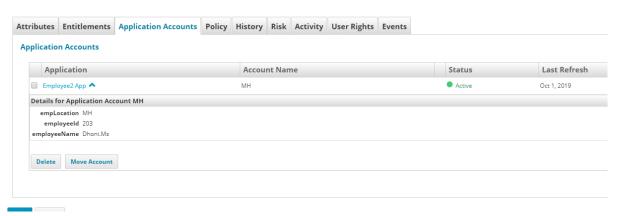
Accounts scanned :4

Identities created :2

Identities updated :2

But couldn't happen means correlation is not happening based on Identity Attribute. Then how identities were created?

Cool, see the below screenshot

View Identity MH

| Attributes | Entitlements | Application Accounts | Policy | History | Risk | Activity | User Rights | Events |

Application Accounts

Application	Account Name	Status	Last Refresh
☐ Employee2 App ⌃	MH	● Active	Oct 1, 2019

Details for Application Account MH

empLocation MH
employeeId 203
employeeName Dhoni.Ms

Delete   Move Account

View Identity Joburg

Attributes	Entitlements	Application Accounts	Policy	History	Risk	Activity	User Rights	Events

Application Accounts

	Application	Account Name	Status	Last Refresh
☐	Employee2 App ⌃	Joburg	● Active	Oct 1, 2019

Details for Application Account Joburg

empLocation Joburg
employeeId 204
employeeName Adharsh.Katte

[Delete] [Move Account]

View Identity Santon

Attributes	Entitlements	Application Accounts	Policy	History	Risk	Activity	User Rights	Events

Application Accounts

	Application	Account Name	Status	Last Refresh
☐	Employee2 App ⌃	Santon	● Active	Oct 1, 2019

Details for Application Account Santon

empLocation Santon
employeeId 208
employeeName Amar.Nath

[Delete] [Move Account]

View Identity RoseBank

Attributes	Entitlements	Application Accounts	Policy	History	Risk	Activity	User Rights	Events

Application Accounts

	Application	Account Name	Status	Last Refresh
☐	Employee2 App ⌃	RoseBank	● Active	Oct 1, 2019

Details for Application Account RoseBank

empLocation RoseBank
employeeId 334
employeeName Karthik.Kota

[Delete] [Move Account]

Identities were created based on attribute what we specified in Display Attribute.

Let's take another use example.

Consider Employee3.csv

employeeId	employeeName	empLocation
7645	Adharsh.Katte	Joburg
9856	Amar.Nath	Santon
12345	Karthik.Kota	RoseBank

987   Harish.Kandha   USA

Configure the application by specifying the employeeId as Identity Attribute and employeeName as Display Attribute and run the account aggregation and see the results

Accounts scanned :4

Identities created: 2
Identities updated :2

Task Result

Details				
Name	Employee3 App account aggregation		Started By	The Administrator
Type	Account Aggregation		Started	10/1/19 10:47:29 AM
Description	Task template for application account scanning.		Completed	10/1/19 10:47:33 AM
Run Time	0:00:03		Average Run Time	0:00:00
Run Time Change	0%		Host	LAPTOP-5E7MC3NR
Status	✓ Success		Progress	Completed

Return to Tasks

Attributes	
Attribute	Value
Applications scanned	Employee3 App
Accounts scanned	4
Identities created	2
Identities updated	2

Application	Account	Action	Identity	Attribute
Employee3 App	7845	Create	Adharsh.Katte	
Employee3 App	9856	CorrelateNewAccount	Amar.Nath	*IdentityName = Amar.Nath
Employee3 App	12345	CorrelateNewAccount	Karthik.Kota	*IdentityName = Karthik.Kota
Employee3 App	987	Create	Harish.Kandha	

The employeeName (we have specified as Display Attribute) Adharsh.Katte and Harish.Kandha were only created rest of two were just correlated because of were already there. We can see task results. Action field.

Conclusion:

So, by this entire explanation we can come to know few things.

- Identity is created based on Display attribute (search in identity warehouse).
- Correlation is not happening based on Identity Attribute if we don't select any Account Correlation or Correlation rule.
- The correlation is going to be done based on Display Attribute only.
- Identity Attribute is used for pulling unique data from the application and aggregate it into IIQ
- Irrespective of selecting option **Authoritative Application** it will apply for both cases.