eazyBlCOMMUNITYDAYS2023

Advanced MDX: Recipe to Change Report Context

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eazyBl COMMUNITY DAYS 2023

COMPLEX THINGS POSSIBLE

- What is context and why to change it
- eazyBl full of stars
- 3 use cases



All selected values in Rows, Columns, and Pages form the report context. The measures are context responsive.

eazyBI Documentation

Report context

Pages	Nonempty	Columns M	leas
> Project		Table Bar	Lin
> Time		X D C	٤
Rows	Nonempty	DEMO Beta ~	
> Priority			lss
			Sto
		Highest	
		High	
		Medium	
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sures			> [s	sue	Туре	
ne Pi	e Scatt	er Timel	ine Ma	ар	Gantt	Gauge
0 3	Hide en	npty rows 🗸	Total	~	Freeze	header
2023	~					
sues res	solved	Open iss	ues			
ory	Bug	Story	Bug			
11	5	5	1			
10	15	15	3			
5	4	18	12			
	5	18	12			
4	1	17	19			

In the stands of the second stands and second secon



TIME

VERSION

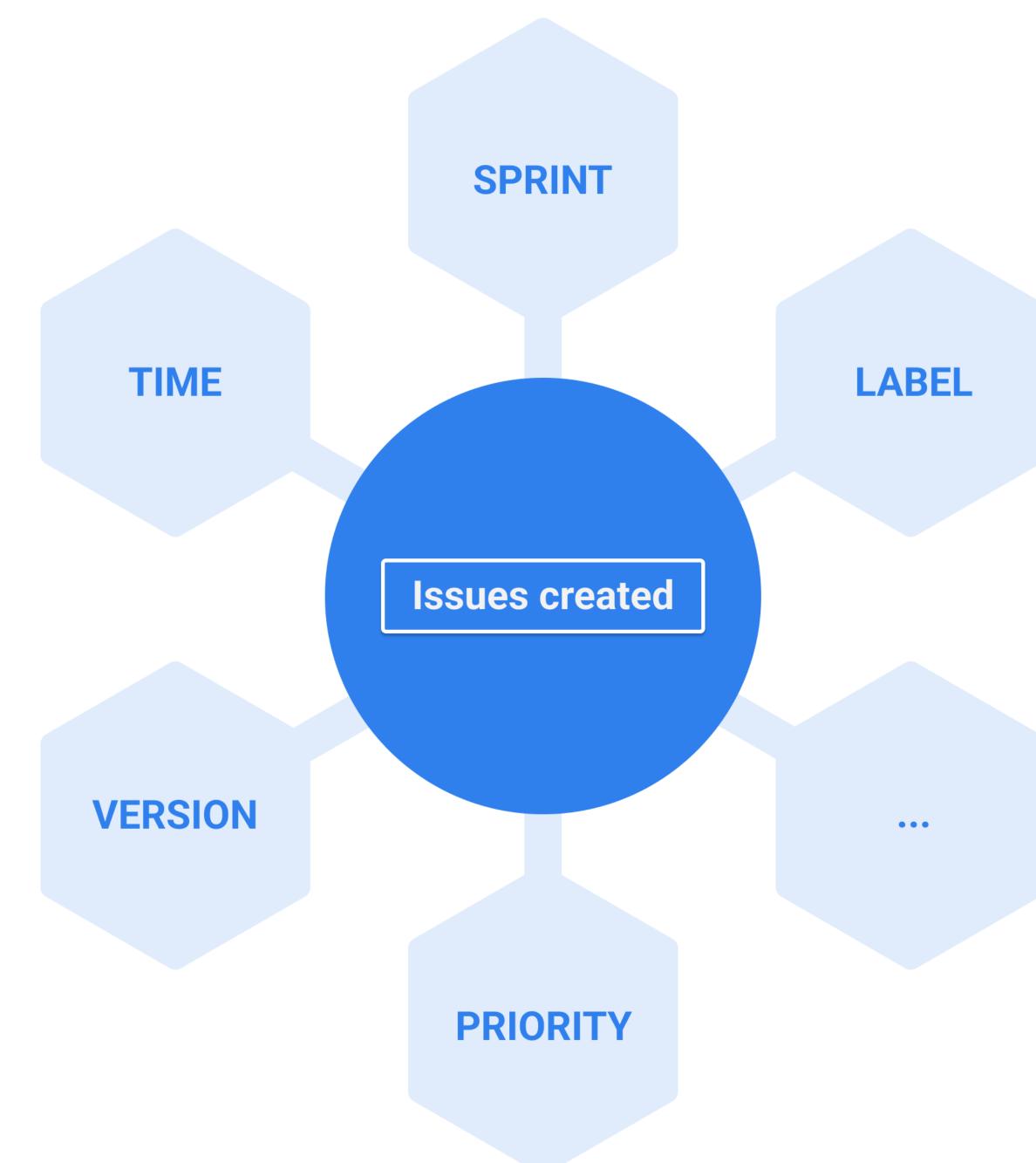
PRIORITY

LABEL

...

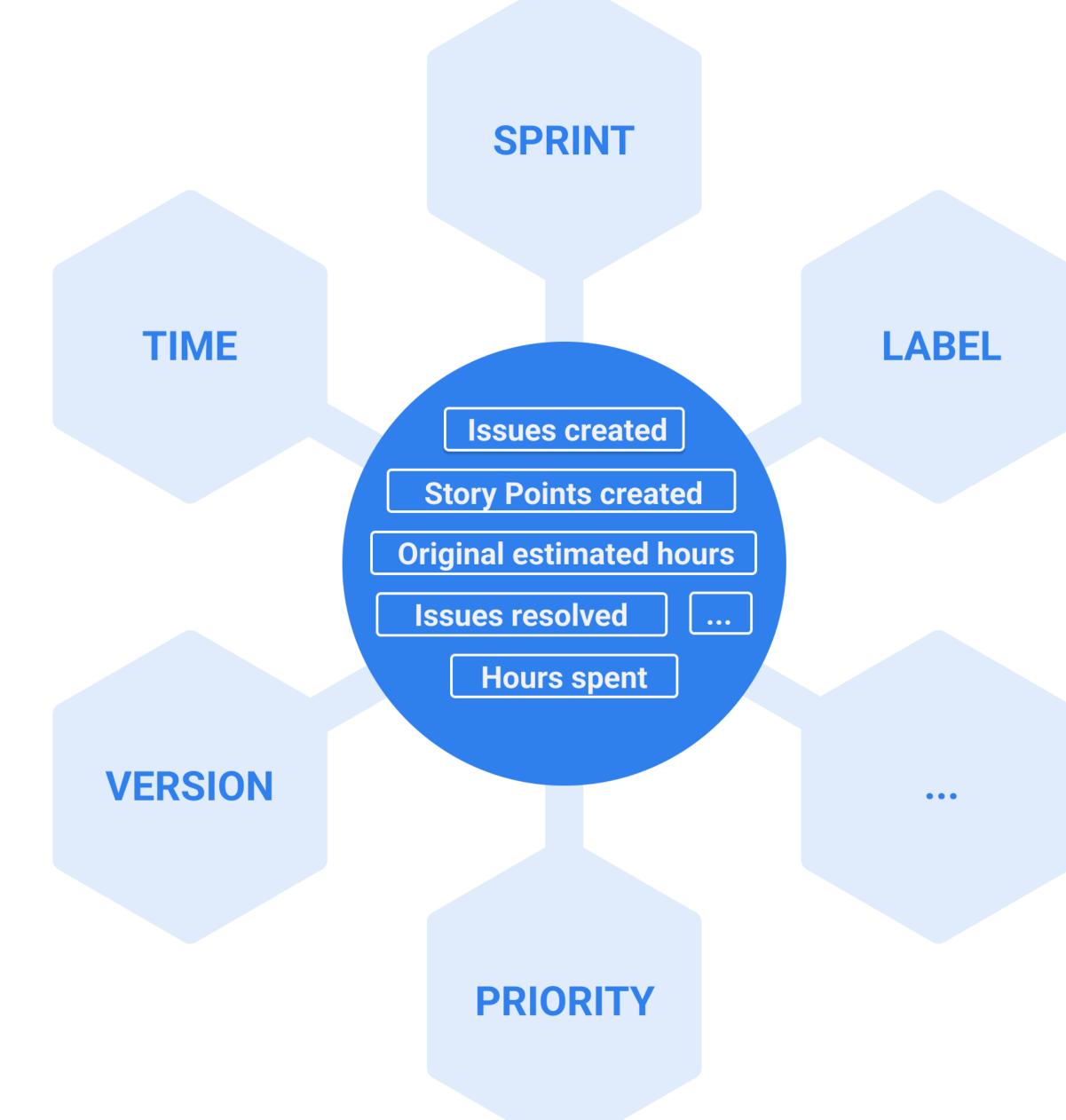


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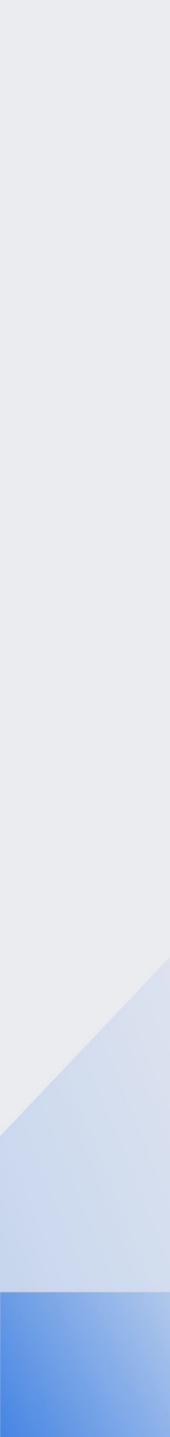
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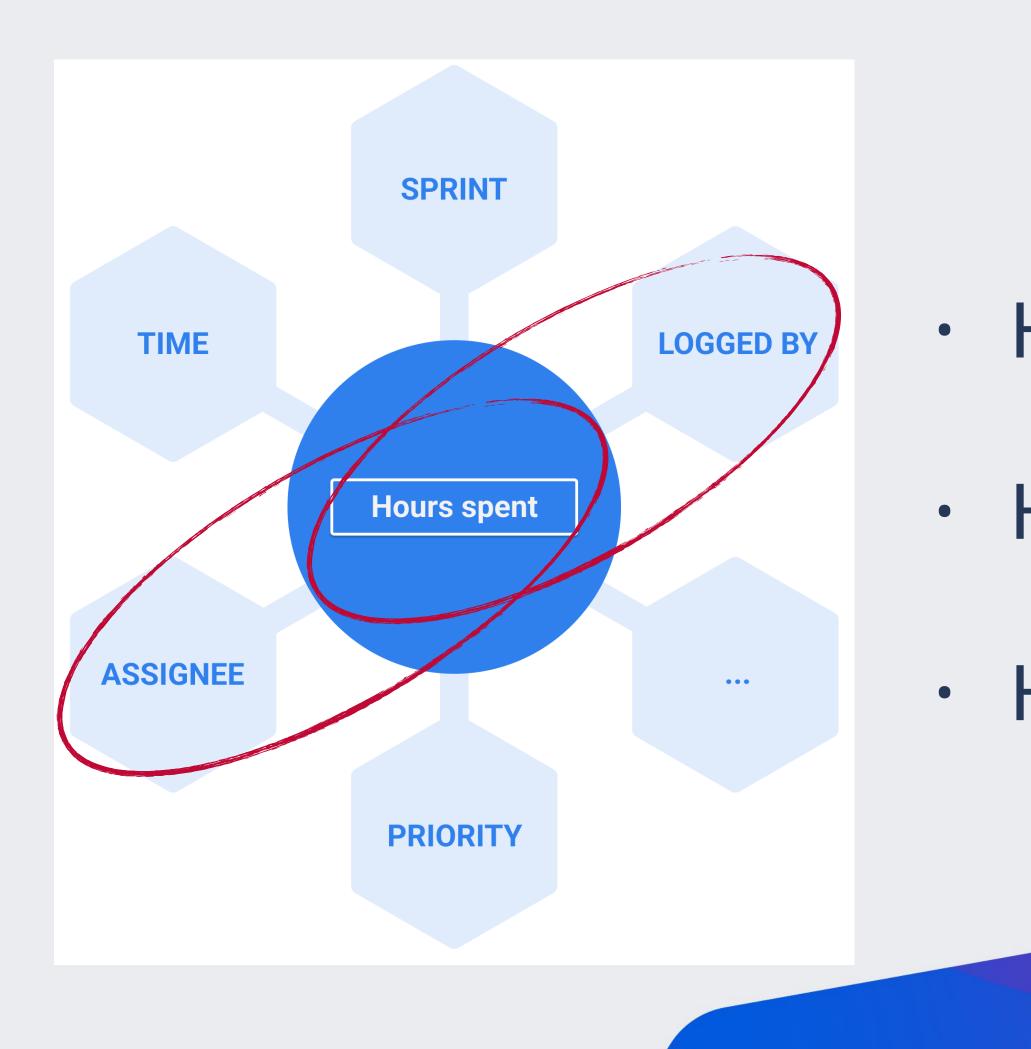
When and why to change context

- Different object share the same name For example, the Team names match in Tempo and AdvancedRoadmaps specific team fields.
- The same object represented in two dimensions For example, same users represented in Assignee and Logged by dimensions.
- Data from different Jira apps or additional sources For example, Sprint and team capacity from Google Sheets.



Hours spent by users

https://eazybi.com/accounts/1000/cubes/Issues/reports/474591-logged-hours-by-user-on-assigned-and-unassigned-issues



Hours spent by Assignee

Hours spent by Logged by

Hours spent by Logged by & Assignee



Pages	Nonempty	Columns Measures			
> Project					
> Time		TableBarLinePie⊠DCD 	Scatter Timeline Map Hide empty rows ~ Total ~	Gantt Gauge Freeze header	
Rows	Nonempty	DEMO Beta ~ 2023 ~			
Assignee		Assignee	Assignee Logged by		
> Logged by		- All Assignees	- All Users	194.00	
			David Sand	48.00	
			Duncan Snow	67.00	
			eazyBI Support admin	11.00	
			eazyBI support demo	68.00	
		David Sand	- All Users	49.00	
			David Sand	48.00	
			eazyBI support demo	1.00	
		Duncan Snow	- All Users	59.00	
			Duncan Snow	56.00	
			eazyBI support demo	3.00	

Pages	Nonempty	Columns
> Project		
Times		Table Bar
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Rows	Nonempty	DEMO Beta
Assignee		
		David Sand
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Measures				
Line Pie	Scatter	Timeline M	lap Gantt	Gauge
	Hide empty	rows ~ Tot	al 🗸	
~ 2023 ~				
	Hours spent	Hours spent on assigned issues	Hours spent in any issue	
d	49.00	48.00	48.00	
now	59.00	56.00	67.00	
oport demo	75.00	64.00	68.00	
				=0.

https://eazybi.com/accounts/22010/cubes/Issues/reports/1649150-logged-hours-by-user-on-assigned-and-unassigned-issues/

Hours spent by Logged by users 1 =

[Measures].[Hours spent in any issue

2 [Measures].[Hours spent], -- find user in Logged by dimension matching selected Assignee 3 [Logged by].[User].GetMemberByKey(4 5 [Assignee].CurrentMember.Key), -- ignore selected Assignee 6 7 [Assignee].DefaultMember 8



Pages	Nonempty	Columns
> Project		
Times		Table Bar
> Time		X D C
Rows	Nonempty	DEMO Beta
Assignee		
		David Sand
		Duncan Sno
		eazyBl supp

https://eazybi.com/accounts/22010/cubes/Issues/reports/1649150-logged-hours-by-user-on-assigned-and-unassigned-issues/

Measures				
Line Pie	Scatter	Timeline N	lap Gantt	Gauge
	Hide empty	rows ~ Tot	al Y	
~ 2023 ~				
	Hours spent	Hours spent on assigned issues	Hours spent in any issue	
d	49.00	48.00	48.00	
now	59.00	56.00	67.00	
oport demo	75.00	64.00	68.00	

Key MDX Functions

GetMemberByKey

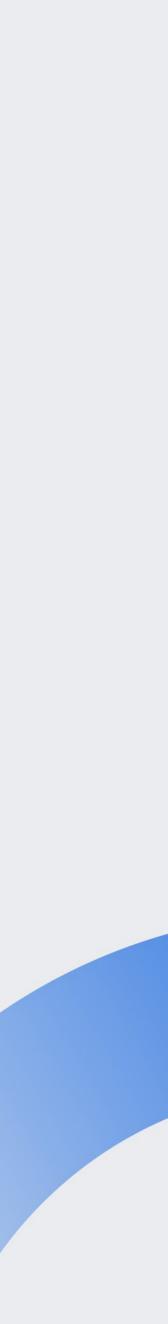
DefaultMember

DefaultContext

Find someone similar – soul mate

Ignore selected one – ghosting

Ignore everyone with exception – madly in love



Group issues by linked Bug priority

https://eazybi.com/accounts/22010/cubes/Issues/reports/1646200-ecd-linked-issues-context

Default context by "Issues Created"

Pages	Nonempty	Columns	Measures		> Priority					
> Project										
		Table B	ar Line Pie	Scatter	Timeline Map Gantt Gauge					
Rows	Nonempty	CX	C D 🕹	Hide empty	✓ Total row ✓ Freeze header					
> Issue		DEMO Alp	oha ~							
Bugs		Issue	Bugs	Issue priority	Issue Bugs	Issues created				
						Highest	High	Medium	Low	Lowest
		DA-161	DA-184	Low	DA-185,DA-184,DA-186,DA-187				1	
			DA-185	Low	DA-185,DA-184,DA-186,DA-187				1	
			DA-186	Low	DA-185,DA-184,DA-186,DA-187				1	
			DA-187	Low	DA-185,DA-184,DA-186,DA-187				1	
		DA-166	DA-188	Highest	DA-189, DA-190, DA-188	1				
			DA-189	Highest	DA-189, DA-190, DA-188	1				
			DA-190	Highest	DA-189, DA-190, DA-188	1				
		Total				3			4	

Issue Bugs	Issues created				
	Highest	High	Medium	Low	Lowest
DA-185,DA-184,DA-186,DA-187				1	
DA-185,DA-184,DA-186,DA-187				1	
DA-185,DA-184,DA-186,DA-187				1	
DA-185,DA-184,DA-186,DA-187				1	
DA-189, DA-190, DA-188	1			the second s	
DA-189, DA-190, DA-188	1				
DA-189, DA-190, DA-188	1				
	3			4	



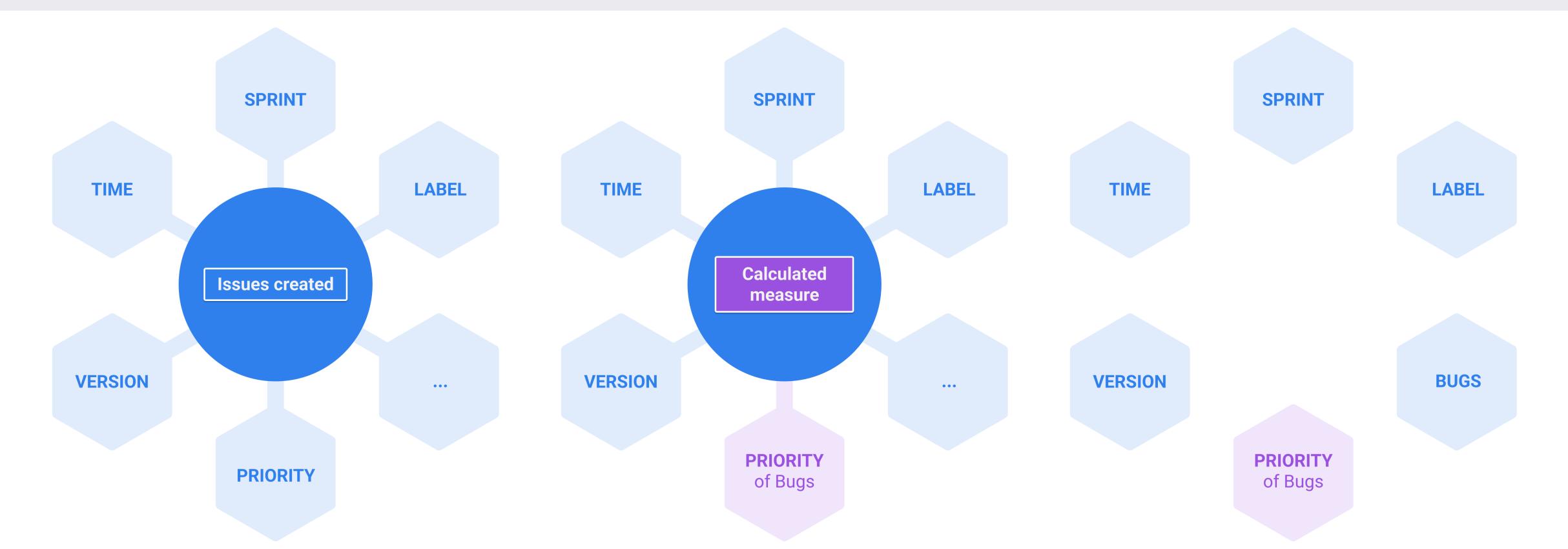
Context change for Bug Priority

Pages	Nonempty	Columns	Measures		> Priority					
> Project										
		Table B	ar Line Pie	Scatter	Timeline Map Gantt Gaug	e				
Rows	Nonempty	CZ	C D 5	Hide empty	✓ Total row ✓ Freeze header					
> Issue		DEMO Alp	oha ~							
> Bugs		Issue	Issue Bugs Issue Issue priority Bugs			Issues crea	ated by B	ug Priority		
						Highest	High	Medium	Low	Lowest
		DA-161	DA-184	Low	DA-185,DA-184,DA-186,DA-187	1		1		
			DA-185	Low	DA-185, DA-184, DA-186, DA-187	' 1				
			DA-186	Low	DA-185, DA-184, DA-186, DA-187	•		1		
			DA-187	Low	DA-185, DA-184, DA-186, DA-187	·				1
		DA-166	DA-188	Highest	DA-189, DA-190, DA-188					1
			DA-189	Highest	DA-189, DA-190, DA-188	1				
			DA-190	Highest	DA-189, DA-190, DA-188	1				
		Total				3		2		2

Issue Bugs	Issues created by Bug Priority				
	Highest	High	Medium	Low	Lowest
DA-185, DA-184, DA-186, DA-187			1		
DA-185, DA-184, DA-186, DA-187	1				
DA-185, DA-184, DA-186, DA-187			1		
DA-185, DA-184, DA-186, DA-187					1
DA-189, DA-190, DA-188					
DA-189, DA-190, DA-188	1				
DA-189, DA-190, DA-188	1				
	3		2		2



Change context of measure



Default context of "Issues created"

Calculated measure to change Priority relation

No such relation for **Bug priority**

Context change in 3 steps

1) Iterate through set of Bugs Filter() & DescendantsSet()

2) Create new relation for Bug and Priority

GetMemberByKey() & DefaultContext()

3) Ignore default relation of Priority DefaultMember

1 - Set of Bugs

Sum(

--go through all linked Bugs Filter(DescendantsSet([Bugs].CurrentMember,[Bugs].[Bugs]), --check if Bug Priority matches selected Priority **DefaultContext((** [Measures].[Issues created], [Issue].[Issue].GetMemberByKey([Bugs].CurrentMember.KEY), [Priority].CurrentHierarchy.CurrentMember) > 0--aggregate linked Bugs ignoring the issue Prority ([Measures].[Issues created], [Priority].CurrentHierarchy.DefaultMember)

2 - Create relation with Priority

```
Sum(
  -- go through all linked Bugs
  Filter(
    DefaultContext((
      [Measures].[Issues created],
      [Issue].[Issue].GetMemberByKey(
        [Bugs].CurrentMember.KEY),
      > 0
  ([Measures].[Issues created],
  [Priority].CurrentHierarchy.DefaultMember)
```

DescendantsSet([Bugs].CurrentMember,[Bugs].[Bugs]), --check if Bug Priority matches selected Priority [Priority].CurrentHierarchy.CurrentMember

--aggregate linked Bugs ignoring the issue Prority

3 - Ignore default relation of Priority

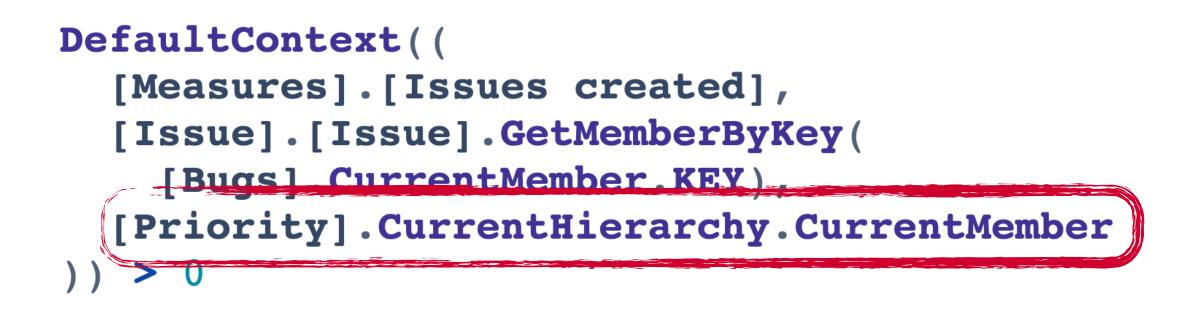
Sum(-- go through all linked Bugs Filter(**DefaultContext((** [Measures].[Issues created], [Issue].[Issue].GetMemberByKey([Bugs].CurrentMember.KEY),) > 0

--aggregate linked Bugs ignoring the issue Prority ([Measures].[Issues created], [Priority].CurrentHierarchy.DefaultMember)

- DescendantsSet([Bugs].CurrentMember,[Bugs].[Bugs]), --check if Bug Priority matches selected Priority
 - [Priority].CurrentHierarchy.CurrentMember

Create new relation

DefaultContext & GetMemberByKey



Ignore default relation

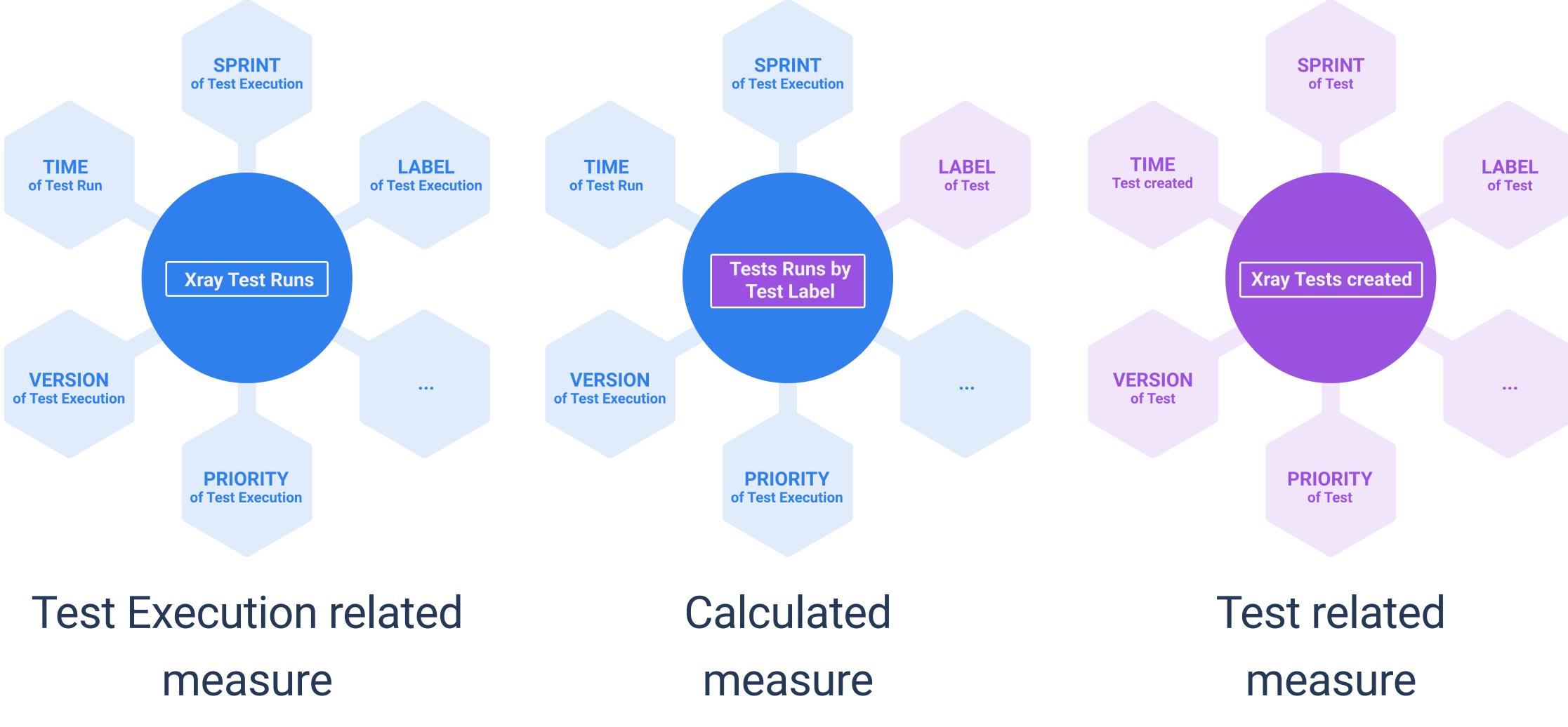
DefaultMember

([Measures].[Issues created],
[Priority].CurrentHierarchy.DefaultMember



Xray Test runs by Test label Special Hi! to Xray friends =)

Xray Test runs by Test label



Context change in 3 steps

1) Iterate through set of Tests Filter() & DescendantsSet()

2) Create new relation for test runs and Label DefaultContext()

3) Ignore default relation of Test run and Label DefaultMember

1 - Set of Test

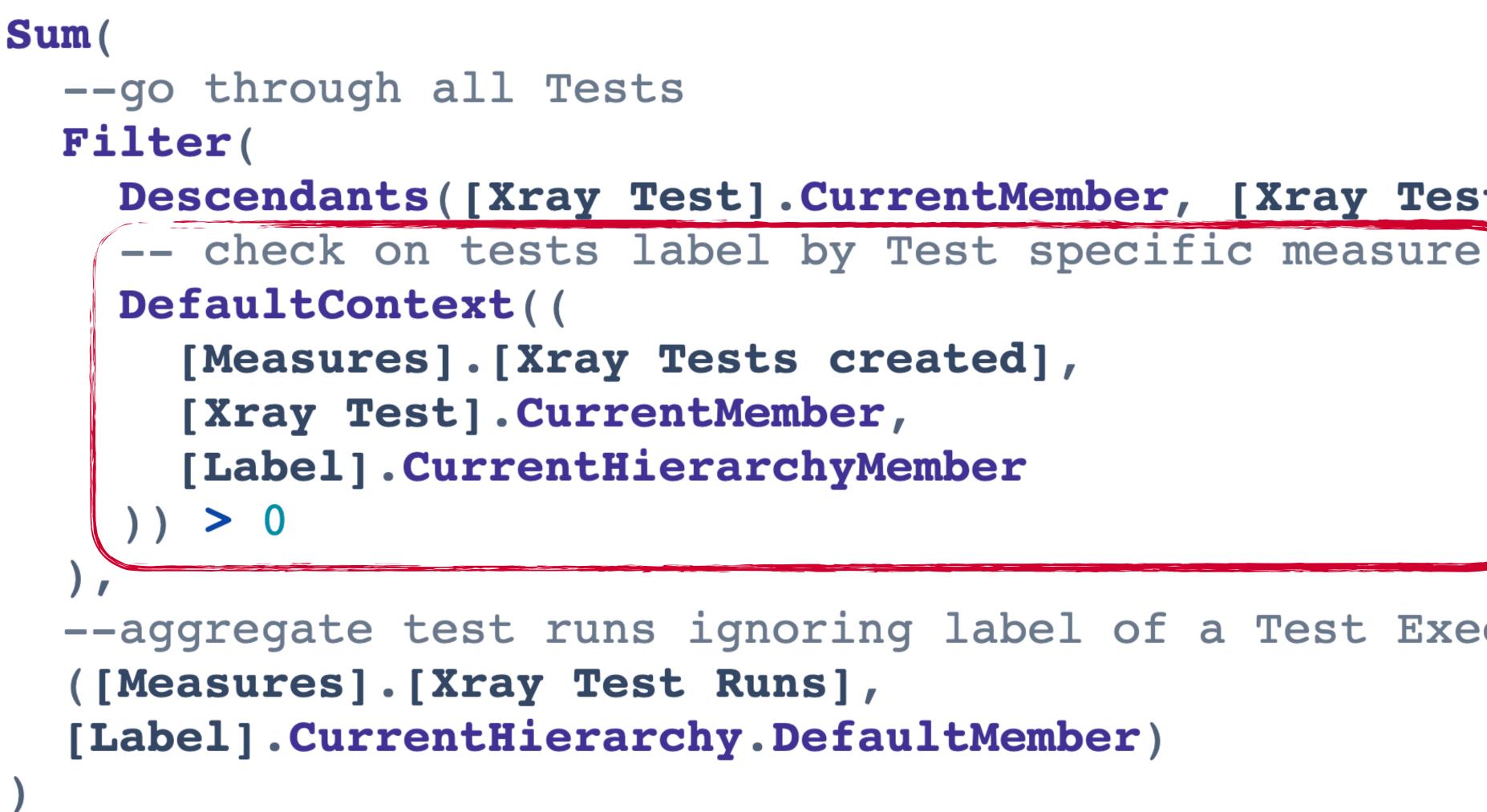
```
Sum(
  --go through all Tests
 Filter(
    -- check on tests label by Test specific measure
    DefaultContext((
      [Measures].[Xray Tests created],
      [Xray Test].CurrentMember,
      [Label].CurrentHierarchyMember
    )) > 0
  ([Measures].[Xray Test Runs],
  [Label].CurrentHierarchy.DefaultMember)
```

Descendants([Xray Test].CurrentMember, [Xray Test].[Test])

--aggregate test runs ignoring label of a Test Execution



2 - Create relation with Test Label



Descendants([Xray Test].CurrentMember, [Xray Test].[Test]),

--aggregate test runs ignoring label of a Test Execution



3 - Ignore Label of Test Execution

```
Sum(
  --go through all Tests
 Filter(
    -- check on tests label by Test specific measure
   DefaultContext((
      [Measures].[Xray Tests created],
      [Xray Test].CurrentMember,
      [Label].CurrentHierarchyMember
      > 0
  --aggregate test runs ignoring label of a Test Execution
  ([Measures].[Xray Test Runs],
  [Label].CurrentHierarchy.DefaultMember)
```

Descendants([Xray Test].CurrentMember, [Xray Test].[Test]),

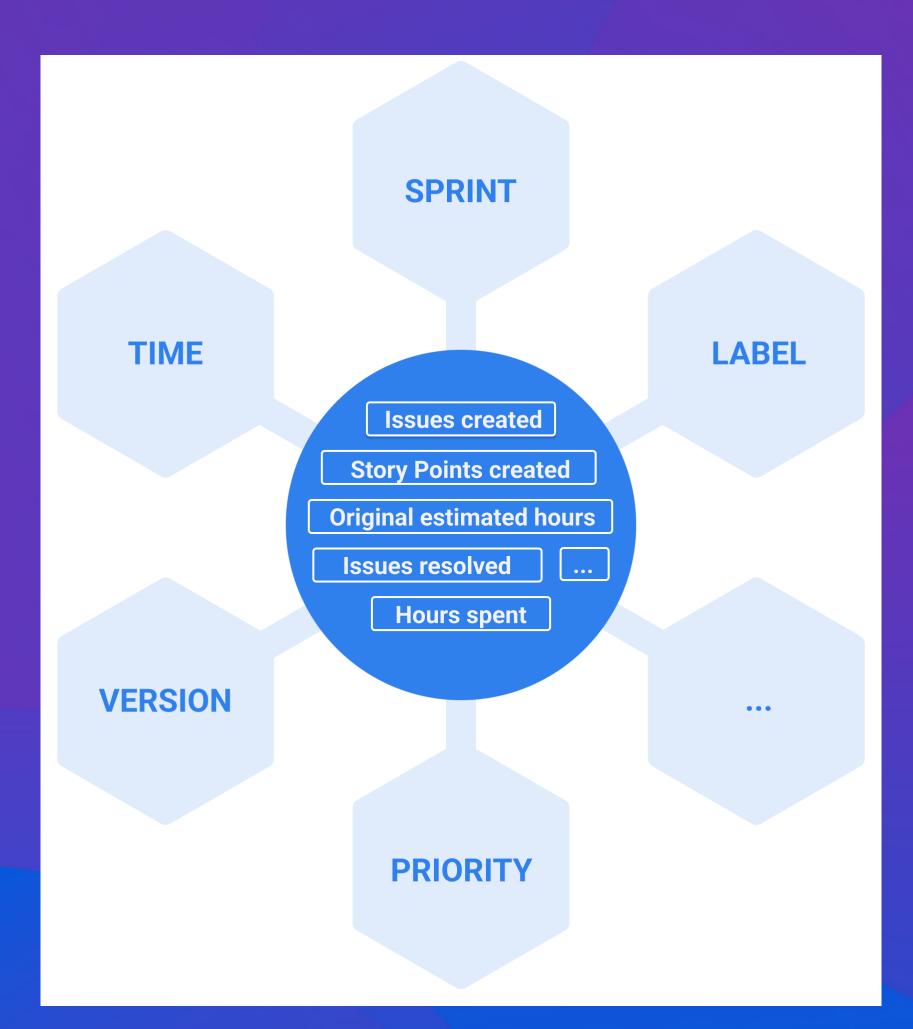


Xray Test runs by Test label

Pages	Nonempty	Columns M
> Xray Test Plan		
		Table Bar
Rows	Nonempty	X D C
> Label		XDOG-102 Tes
		— All Labels
		(none)
		APP_1
		APP_2
		demo
		label_t
		label_x
		label_z
		testing

Measures				
L	ine Pie	Scatter Timel	ine Map	Gantt Gauge
D ⊉ Total ✓				
Testing in Sprint 3 ~				
	Xray Test Runs	Test Runs by Test label	Xray Tests created	
	541	541	90	
	122	81	9	
	161			
	164			
	164			
		307	51	
	85	153	30	
	131			
		460	81	

The measure is the core of the context!



Balance the connections in calculated measure

Create new relation

Ignore default relation



Work on relationships. It ain't eazy but it is rewarding.

Every article on psychology I have read.



Questions?

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