Understanding Tuples

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eazyBI
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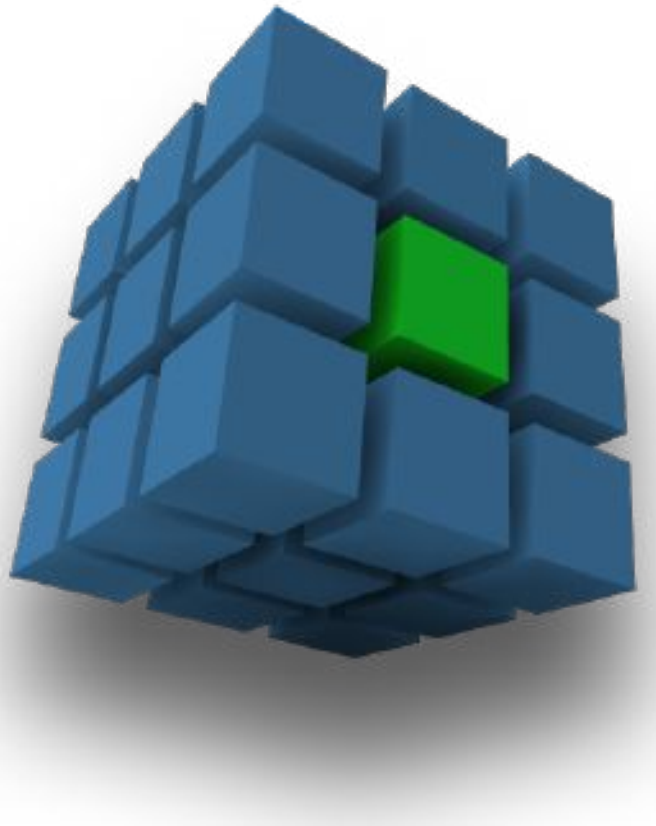
What is tuple?
Why at eazyBI support we love them?
Real life examples with eazyBI

What is tuple?

A tuple is an **intersection** of exactly a **single member** from **each dimension** (hierarchy) in the cube.

Mark Whitehorn, Robert Zare and Mosha Pasumansky “Fast Track to MDX”
2004, Springer

Tuple always identifies an **exact cell** in the multi-dimensional matrix



```
(
   [Measures].[Issues created],
   [Issue Type].[Bug],
   [Time].[2018].[Q2 2018].[May 2018]
)
```

Sets

Going through large sets with Descendants(..) can be problematic…
Though sometimes necessary.

Tuple

By using Tuple we can often avoid long running reports, timeouts …

Live demo
https://eazybi.com/accounts/22010/cubes

Tuple examples

- **Bugs created**
- Top Priorities %
- User logged hours

Bugs created

```
(
   [Measures].[Issues created],
   [Issue Type].[Bug]
)
```

Issues created without bugs

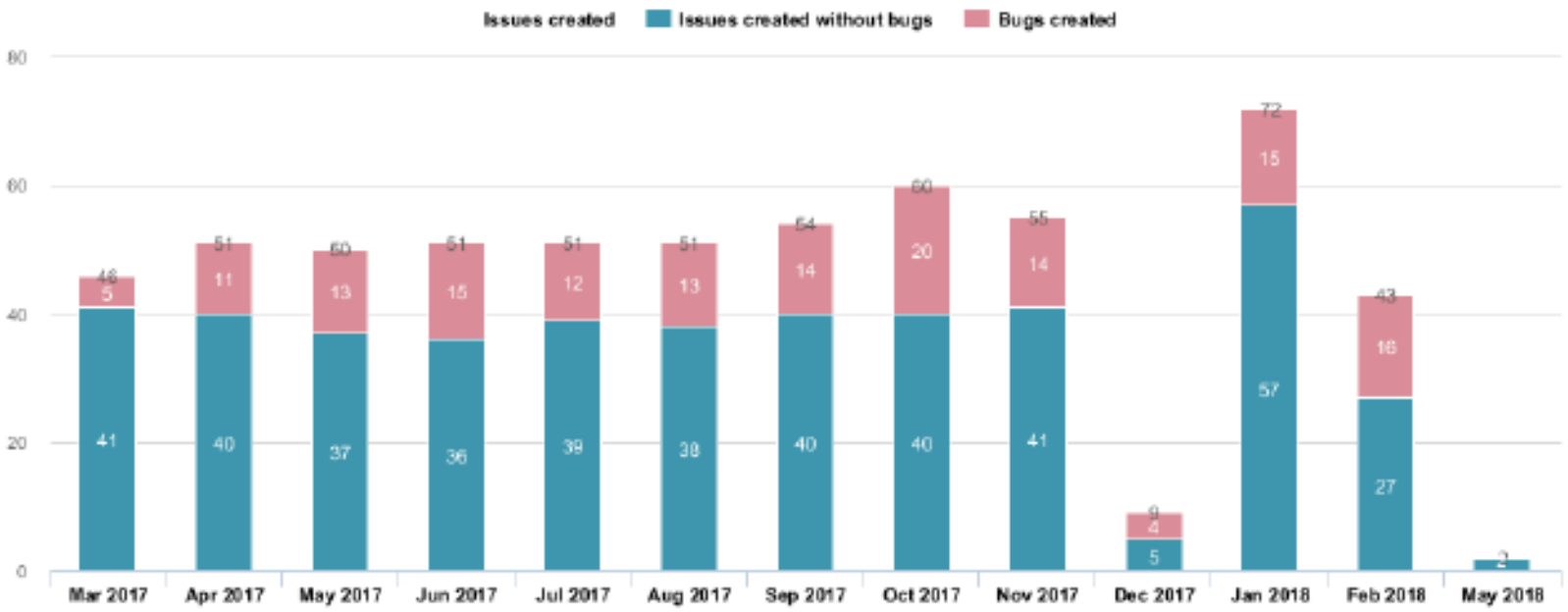
```
[Measures].[Issues created] -
[Measures].[Bugs created]
```

Tuple examples

Bugs created

Top Priorities %

User logged hours



Tuple examples

Bugs created

Top Priorities %

User logged hours

```
% resolved in Top priorities

(
   [Measures].[Issues resolved],
   [Priority].[Top priorities]
)
/
(
   [Measures].[Issues resolved],
   [Priority].DefaultMember
)
```

Tuple examples

Bugs created

Top Priorities %

User logged hours

Top priorities

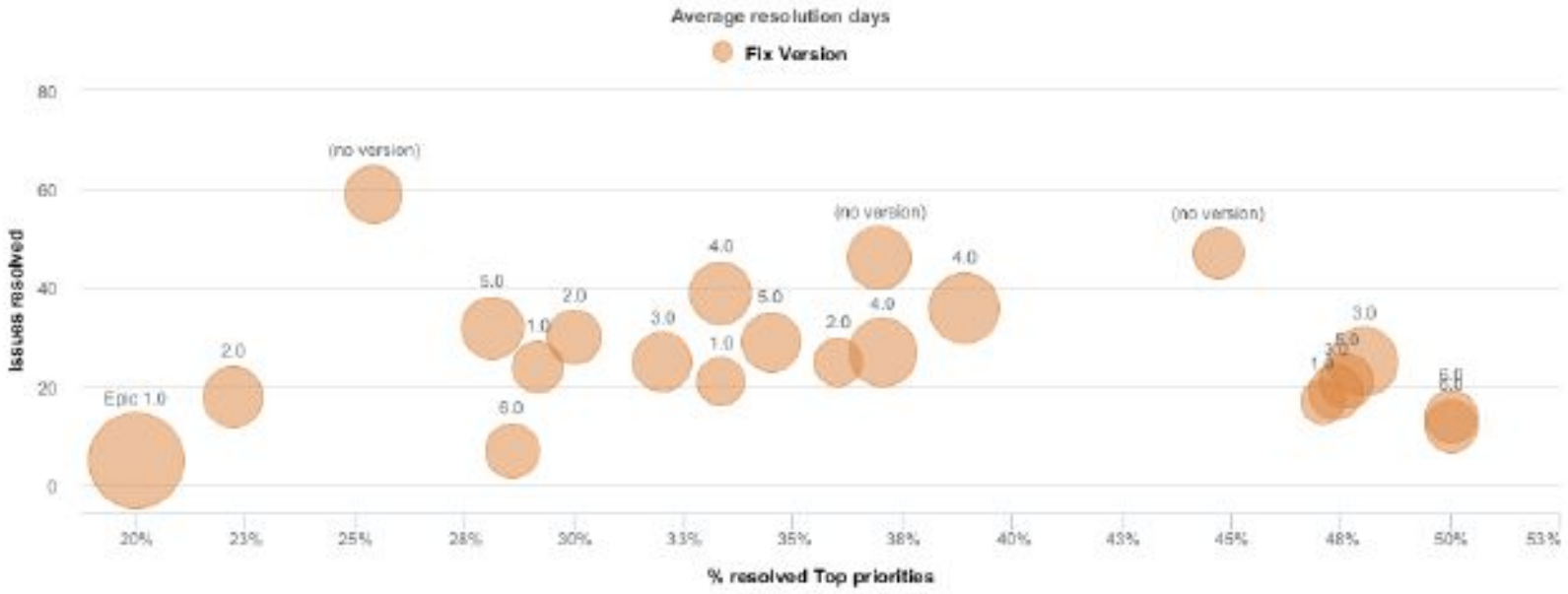
```
Aggregate({
   [Priority].[Highest],
   [Priority].[High]
})
```

Tuple examples

Bugs created

Top Priorities %

User logged hours



Tuple examples

Bugs created

Top Priorities %

User logged hours

```
Hours spent in assigned issues

(
   [Measures].[Hours spent],
   [Logged by].[User].GetMemberByKey(
     [Assignee].CurrentMember.Key
   )
)
```

Tuple examples

Bugs created

Top Priorities %

User logged hours

Hours spent in any issue

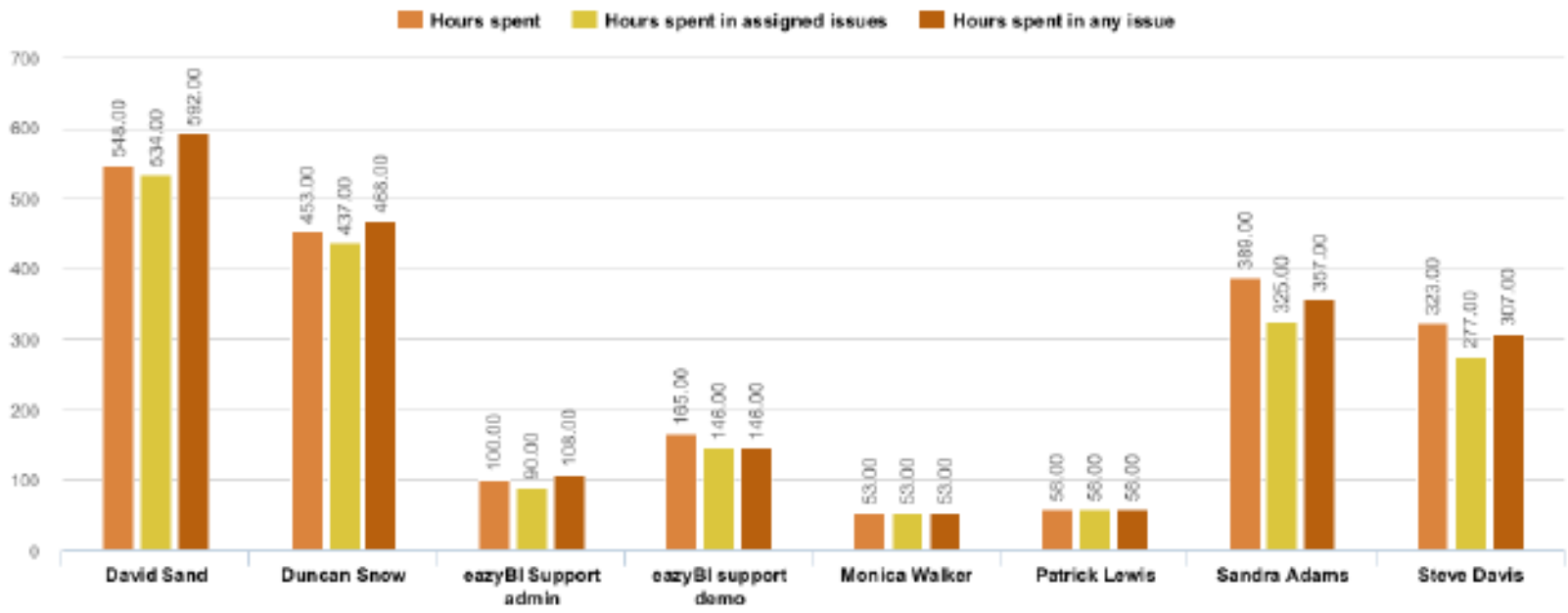
```
(
   [Measures].[Hours spent],
   [Logged by].[User].GetMemberByKey(
     [Assignee].CurrentMember.Key
   ),
   [Assignee].DefaultMember
)
```

Tuple examples

Bugs created

Top Priorities %

User logged hours



Questions?

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Thank you!