



Metadata: A life-sustaining liquid for the SAS® Intelligence Platform

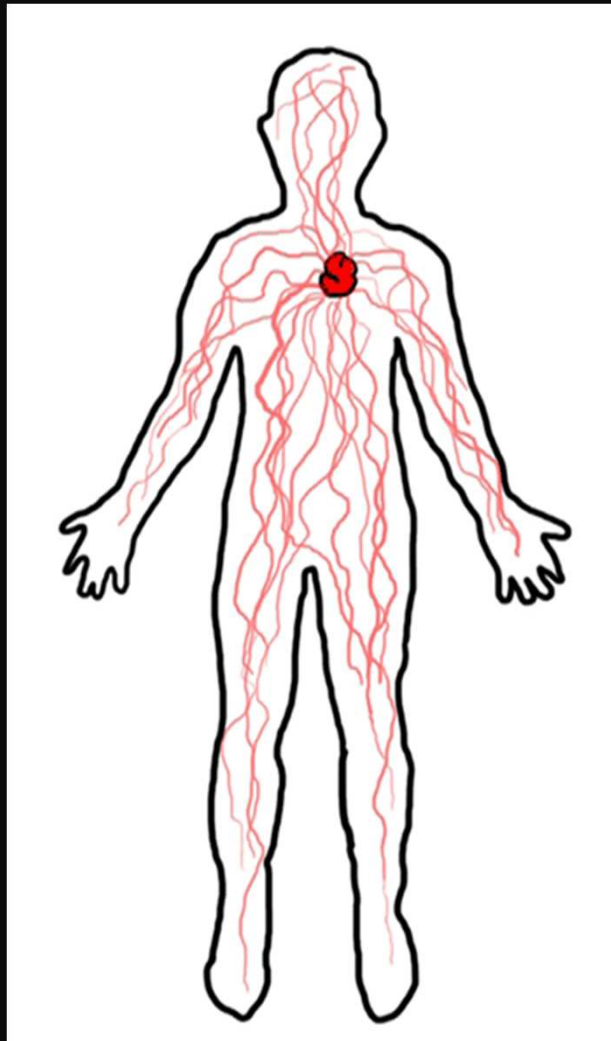
Michelle Homes

WASUP – 25JUN2013

productivity through metadata visibility™ 

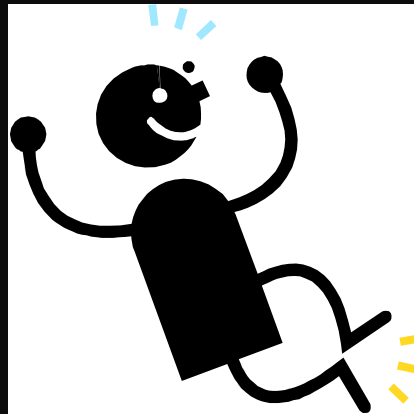


Blood



...An essential, life-sustaining liquid, carries oxygen, nutrients and defences through the entire body.

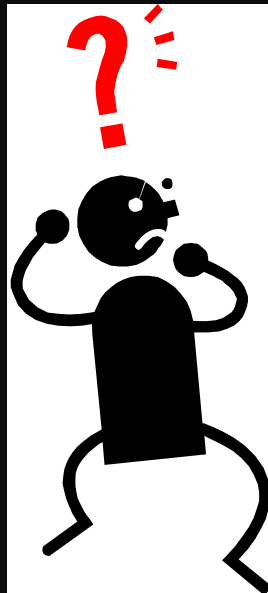
Your body relies on
blood to survive!





Metadata

Does your organisation rely on
metadata to survive?





Agenda

- Metadata – what is it?
- Metadata with SAS Software
- SAS metadata – the blood
- SAS metadata server – the heart
- SAS Intelligence Platform – the body
- Vitality of metadata – lifecycle of business & technical metadata
- Metadata management and maintenance



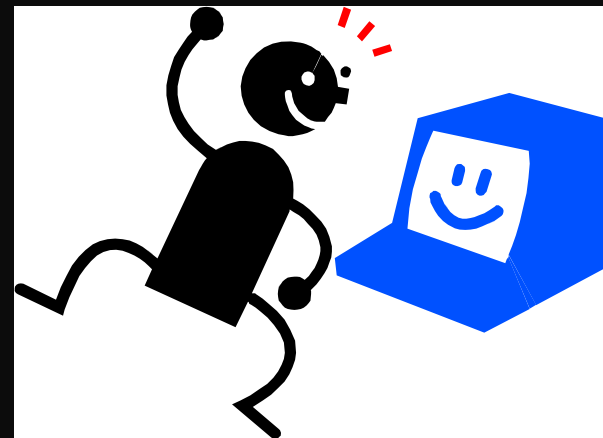
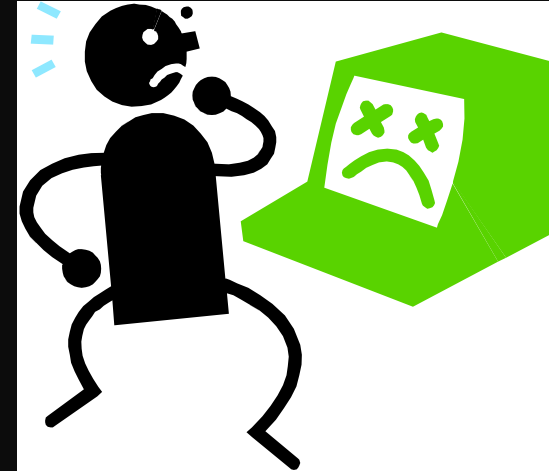
Metadata – what is it?

- “Data about Data”
- Business definitions
 - calculations, banding rules, indicators etc
- Technical definitions
 - Data sources, data transformations, data views, data flows, jobs, programs, reports etc
- Environment definitions
 - Users, groups, servers, scheduling etc
- Your organisations Intellectual Property!



Metadata with SAS Software

- Prior to SAS version 9
 - Dictionary tables – metadata on libraries, tables, columns, options, macro variables
- With SAS version 9
 - Metadata repository – storing and managing enterprise metadata



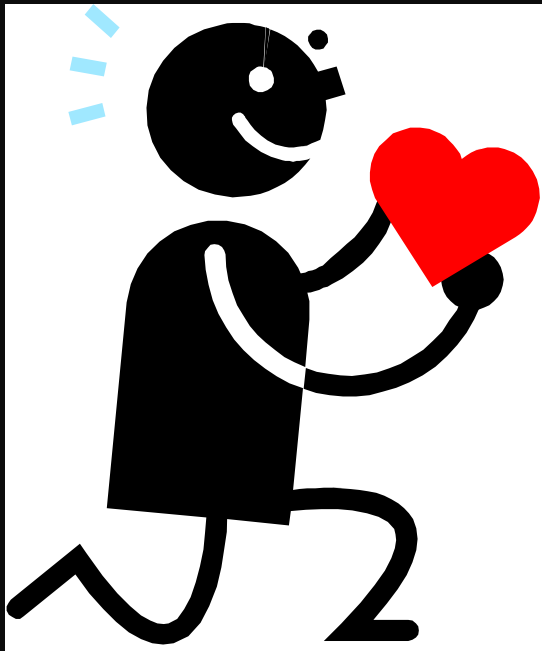


SAS Metadata

- SAS Metadata repository stores information about:
 - Enterprise data sources and data structures
 - Content created and used by SAS applications
 - SAS and third-party servers
 - Users and groups who are allowed to use the system
 - Levels of access that users and groups have to resources



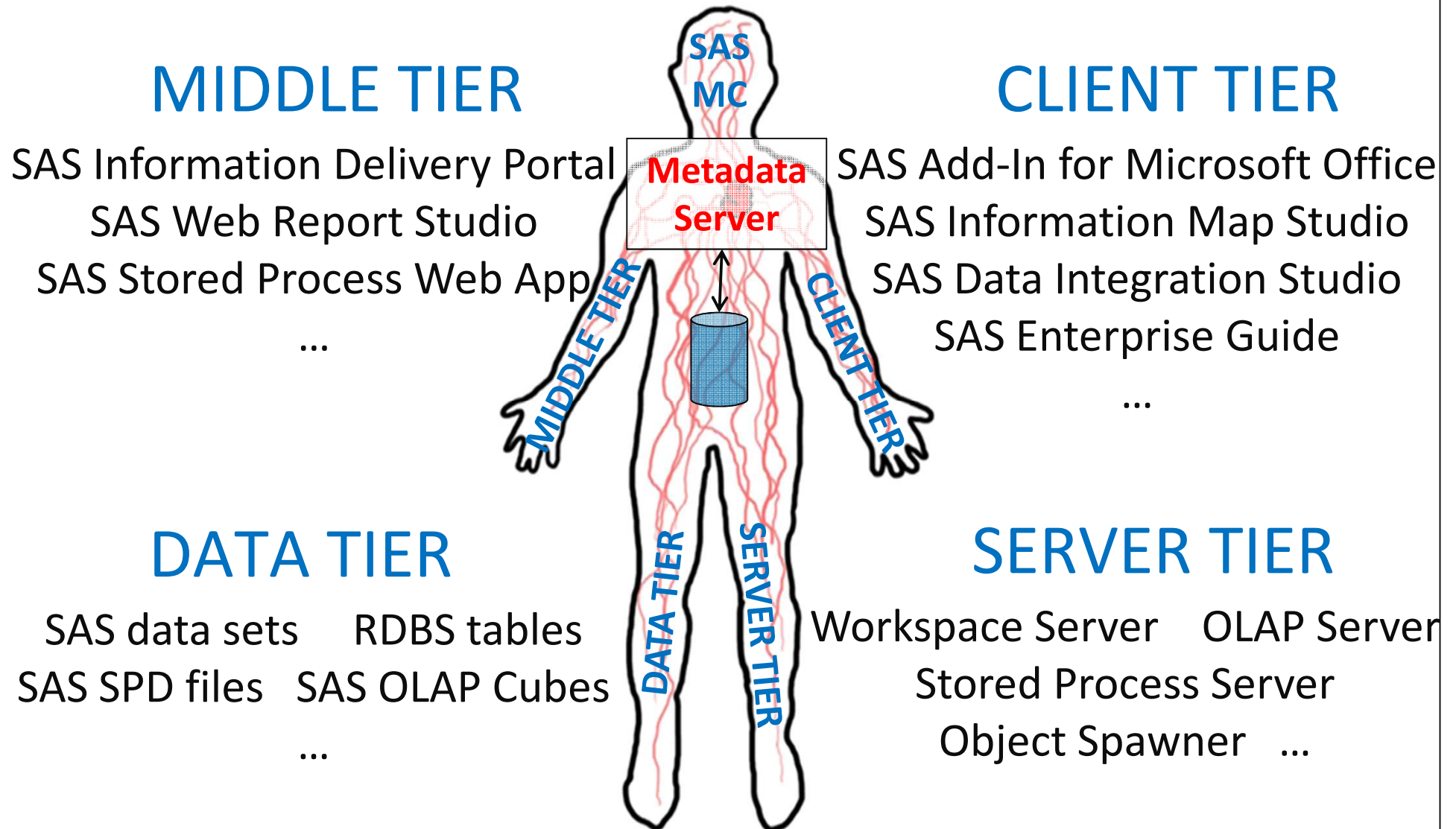
SAS metadata server – the heart



- Provides access to a central repository of metadata
- Exchanges metadata with SAS applications
- Ensures access to consistent and accurate data
- Interoperable and open



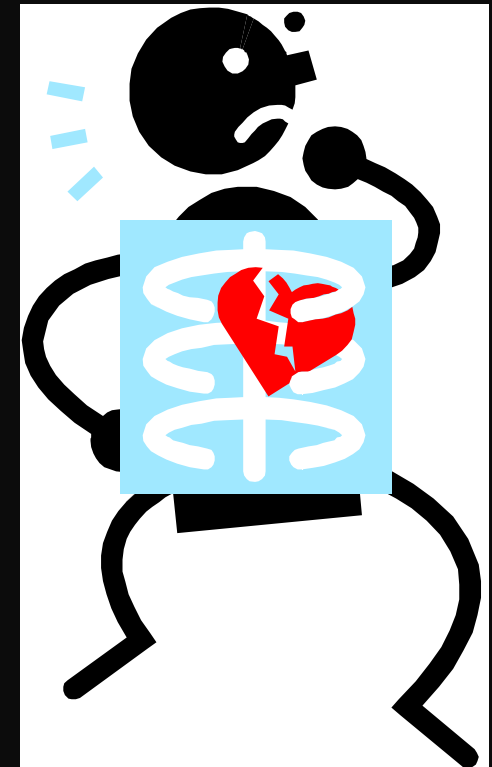
SAS Intelligence Platform – the body





Vitality of metadata

- Metadata provides a means for both the technical documentation of data and the business communication of its meaning.
- Management and Maintenance?
 - Reporting (auditing/governance)
 - Change to business rules, processes
 - Staff changes and access
 - Backups/Disaster Recovery



<http://platformadmin.com/blogs/paul/2011/10/sas93-metadata-backups>



Metadata management & maintenance

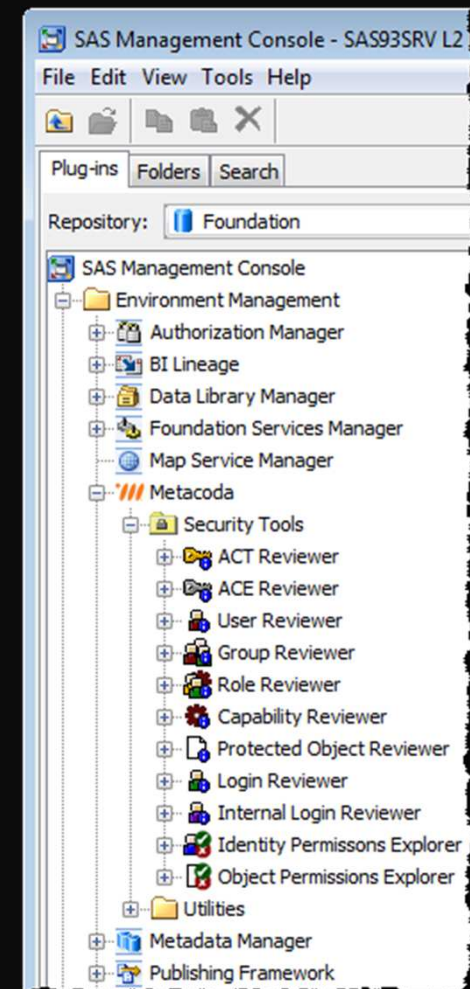


- SAS Applications including:
 - SAS Management Console
 - SAS Data Integration Studio
 - SAS Web Report Studio etc
- Metadata Browser
- Custom metadata reporting
 - proc metadata, XML, macros etc
- Third-party software e.g. Metacoda



About Metacoda

- SAS Alliance Silver Member
- Provide add-ons to SAS® Software for enhanced **metadata** visibility and exploitation
 - Metacoda Security Plug-ins
 - Metacoda Commutual
 - Custom Tasks (SAS Enterprise Guide)
- Goals:
 - Improve your productivity through enhanced metadata visibility





Metacoda Security Plug-ins

SAS Management Console - SAS93 L2 [sasadm]

File Edit View Tools Help

Plug-ins Folders Search

Repository: Foundation

SAS Management Console

- Environment Management
 - Authorization Manager
 - BI Lineage
 - Data Library Manager
 - Foundation Services Manager
 - Map Service Manager
 - Metacoda
 - Security Tools
 - ACT Reviewer
 - ACE Reviewer
 - User Reviewer
 - Group Reviewer
 - Role Reviewer
 - Capability Reviewer
 - Protected Object Reviewer
 - Login Reviewer
 - Internal Login Reviewer
 - Identity Permissions Explorer
 - Object Permissions Explorer
 - Utilities
 - Metadata Explorer
 - Metadata Manager
 - Publishing Framework
 - Schedule Manager
 - Server Manager
 - User Manager
 - Monitoring
 - Application Monitor
 - SAS OLAP Server Monitor
 - Maintenance
- Application Management
 - Configuration Manager
 - Deployment Tester

Filter: name, display name, description, or logins ids contain

Display Name	Description	Login Ids
Aaron Atkins	Business Analyst II	demoaaron (DefaultAuth)
Alice Adams	CEO	demoalice (DefaultAuth)
Barbara Bennings	Data Integration Developer I	demobarbara (DefaultAuth)
BI Dashboard Administrators	The members of this group are allowed to administer content for the SAS BI Dashboard product. The ...	
BI Dashboard Users	The members of this group are allowed general viewing access of content for the SAS BI Dashboard ...	
BI Web Services Users	Allows members to create and delete SAS BI Web Services.	
Bob Baxter	CFO	demobob (DefaultAuth)
Carol Charleston	Sales Director (US)	democarol (DefaultAuth)
Charles Caxton	Data Integration Developer II	democharles (DefaultAuth)
Custom Oracle Users		
David Doyle	Account Rep. (US)	demodavid (DefaultAuth)
Demo: Contains Self 1	Demonstrates a group that contains itself as a member through a nested group ("Demo: Contains Sel...	
Demo: Contains Self 2	(see description for "Demo: Contains Self 1")	
Dorothy Dickens	Data Analyst I	demodorothy (DefaultAuth)
Euan Easton	Data Analyst II	demoeuan (DefaultAuth)
Eve Evans	Sales Director (CA)	demoeve (DefaultAuth)
Famke Foster	Report Developer I	demofamke (DefaultAuth)
Fred Faulkner	Account Rep. (CA)	demofred (DefaultAuth)
Gareth Gale	Report Developer II	demogareth (DefaultAuth)
Gavle Gordon	Sales Director (NZ)	demoavle (DefaultAuth)

Folders Libraries Object Search

SAS Folders

- BI Lineage
- Documents
- Metacoda Demos
- Pet Store
- Portal Application Tree
- Products
- Shared Data
- System
- TestingCustom
- Users
- Vegas Enterprises

Filter: member name contains

Type	Name	Access Level	RM	WM	WMM	CM	R	W	C	D	A	X
Folder	Vegas Enterprises	Update folder members, Update data	✓	✗	✓	✓	✓	✓	✓	✓	✗	
Folder	Shared Data	Update folder members, Update data	✓	✗	✓	✓	✓	✓	✓	✓	✗	
Folder	Pet Store	Update folder members, Update data	✓	✗	✓	✓	✓	✓	✓	✓	✗	
Root folder	.	View metadata	✓	✗		✗	✗	✗	✗	✗	✗	
Folder	Users	View metadata	✓	✗	✗	✗	✗	✗	✗	✗	✗	
Folder	TestingCustom	View metadata	✓	✗	✗	✗	✗	✗	✗	✗	✗	
Folder	System	View metadata	✓	✗	✗	✗	✗	✗	✗	✗	✗	
Folder	Products	View metadata	✓	✗	✗	✗	✗	✗	✗	✗	✗	
Tree	Portal Application Tree	View metadata	✓	✗		✗	✗	✗	✗	✗	✗	
Folder	Metacoda Demos	View metadata	✓	✗	✗	✗	✗	✗	✗	✗	✗	
Folder	Documents	View metadata	✓	✗	✗	✗	✗	✗	✗	✗	✗	
Folder	BI Lineage	Hide metadata	✗	✗	✗	✗	✗	✗	✗	✗	✗	

Find a user or group and explore their effective permissions over a number of metadata objects across all repositories.

sasadm@saspw as Unrestricted

sas93lnx02 : 8562



Metacoda Commutual

Search and collaborate on business and technical metadata within SAS platform installations:

- **Activity:** get notified about changes & discussions
- **Search:** find the items you want & register your interest
- **Discussions:** share your knowledge & learn from others
- **Easy Access:** get easy access from anywhere
- **Performance:** find what you need, when you want it, fast
- **Security:** access to metadata you normally have access to



Metacoda Commutual

Activity

Quinn Quinlan

Activity SAS Folders Help Search

All Added Modified Removed Comments

Product Sales Analysis by Customer Age Group and Country.srx Jane Jacobs

SAS Folders/ Pet Store/ Reports/

Thanks for your attention to detail. A service request #82415 has been raised for this when you were on vacation.

2 0 added a comment - 18Apr2013 11:00:40

Product Sales Analysis by Customer Age Group and Country.srx Zac Zimmerman

SAS Folders/ Pet Store/ Reports/

It would be good if the pie chart stored process could be changed to allow us to select either a bar chart or pie chart. Our standard reporting chart type is vertical bar chart.

2 0 added a comment - 18Apr2013 10:55:27

Age Group by Country Report Barbara Bennings

SAS Folders/ Pet Store/ StoredProcesses/

2 0 modified the Stored process - 18Apr2013 10:50:09

All Customer Country Age Statistics Zac Zimmerman

SAS Folders/ Pet Store/ StoredProcesses/

Metacoda

Search All Metadata (Public Types) Search

Jump to: Details Stored Process Changes Comments Attributes Associated Objects

Age Group by Country Report Remove Watch

Object Id	A5J40VK3.B500002Q		
Name	Age Group by Country Report		
Type	Stored process		
Description	Stored process produces a customer demographic report on age group bands		
Location	SAS Folders/ Pet Store/ StoredProcesses/		
Created	11Apr2013 13:59:35	Modified	18Apr2013 10:50:09
URI	OMSOBJ:ClassifierMap/A5J40VK3.B500002Q		

Stored Process

Open in SAS® Stored Process Web Application

Changes

Filter Results

Action	Date	User
modified	18Apr2013 10:50:09	Barbara Bennings
added	11Apr2013 13:59:35	Barbara Bennings

Comments

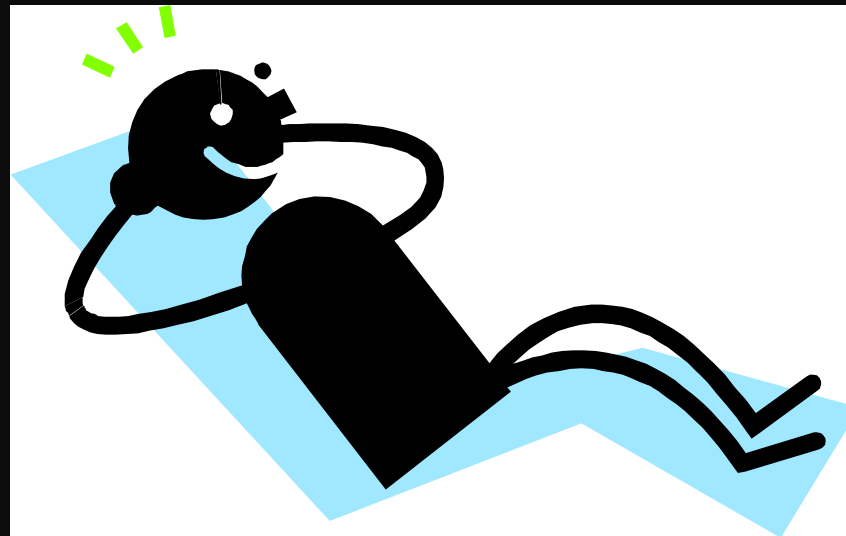
Zac Zimmerman 18Apr2013 10:27:03

I noticed the age group bands have the age repeated. Where would the 30 year olds would fall when we have a "18-30" group and a "30-45" group?

Barbara Bennings 18Apr2013 10:33:15

productivity through metadata visibility™





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- Vitality of metadata – lifecycle of business & technical metadata



Questions?

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 - **Twitter:** <http://www.twitter.com/HomesAtMetacoda>
- Metacoda
 - **Web:** <http://www.metacoda.com/>
 - **Blog:** <http://www.metacoda.com/en/blog/>
 - **LinkedIn:** <http://www.linkedin.com/company/metacoda>
 - **Twitter:** <http://www.twitter.com/metacoda>
 - **Facebook:** <http://www.facebook.com/Metacoda>
 - **YouTube:** <http://www.youtube.com/user/metacoda/>

<http://blogs.sas.com/content/sgf/2012/12/05/why-i-love-sas-metadata/>