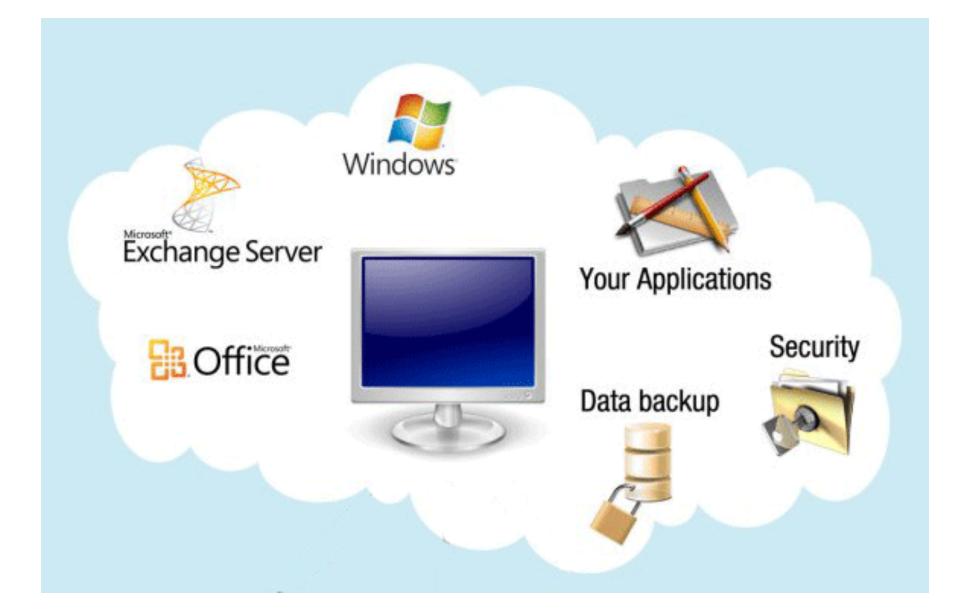# What is Cloud Computing?

How familiar are you with Cloud Computing? (Choose one)

A. Very familiar, we use it al the time

B. Somewhat familiar

C. Have only heard the words

D. Never heard of it before

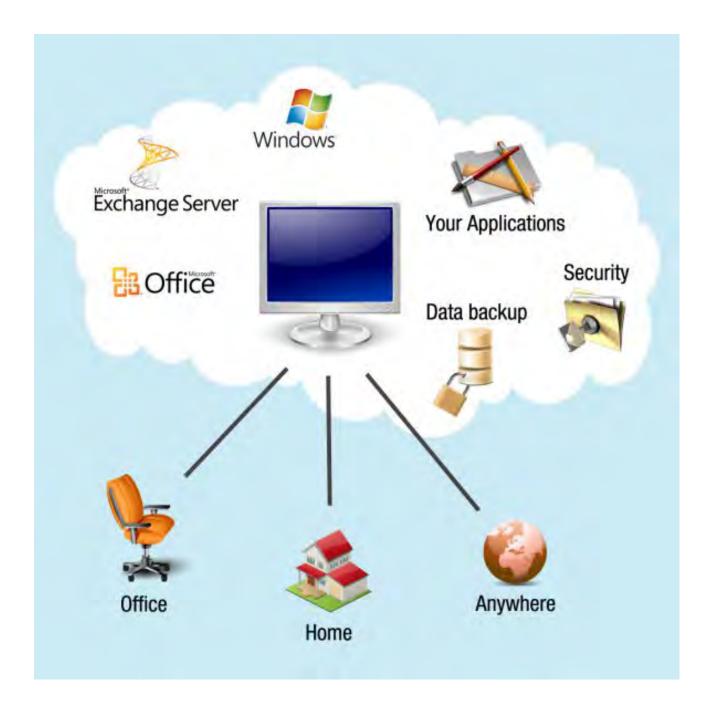# What does it *really* mean?

SOLD!
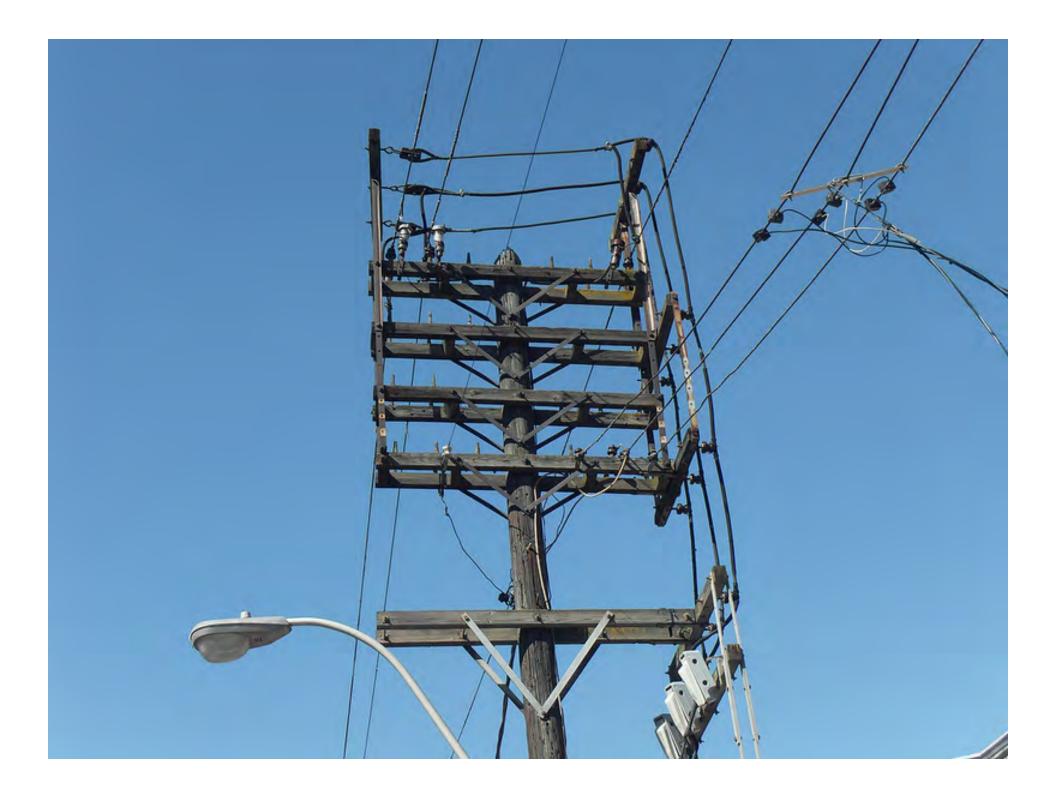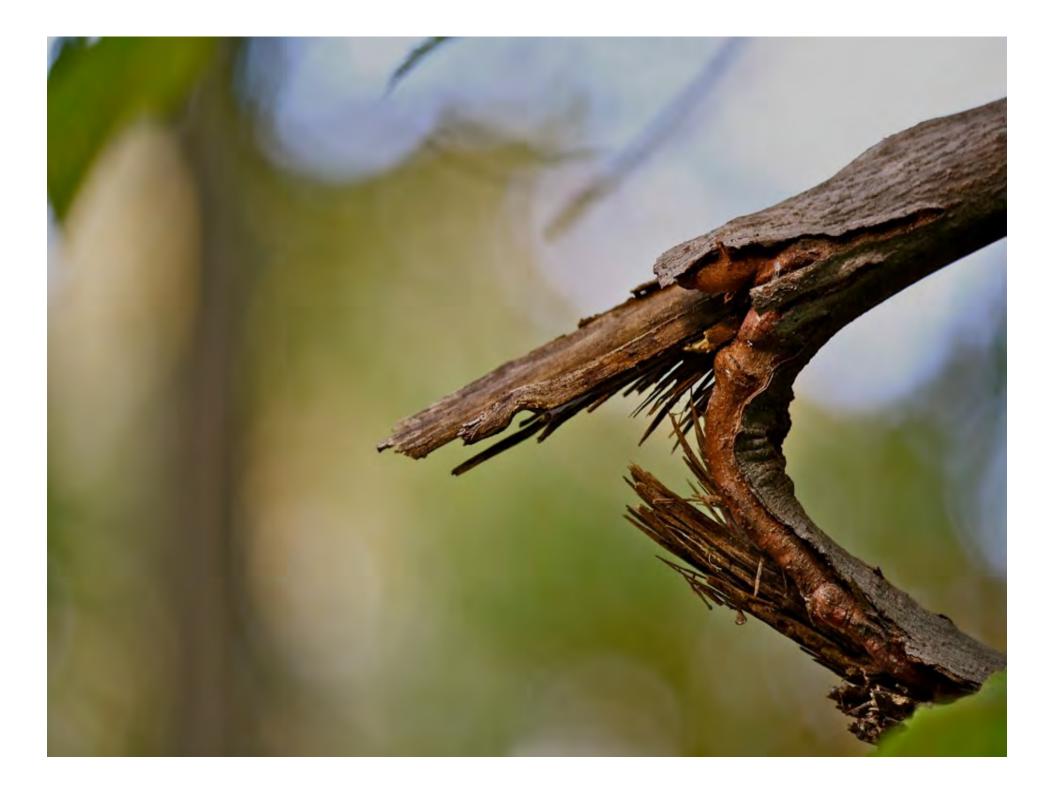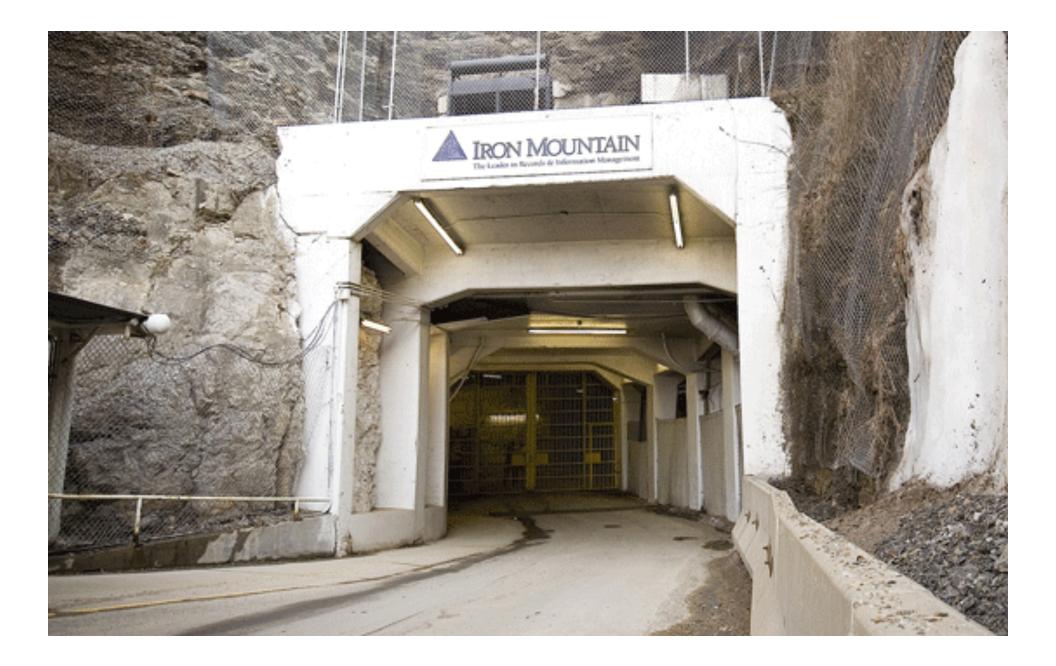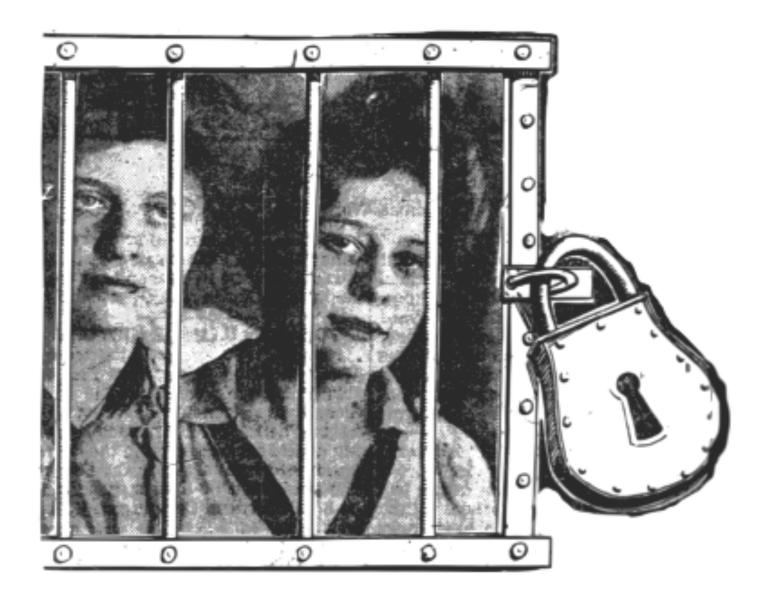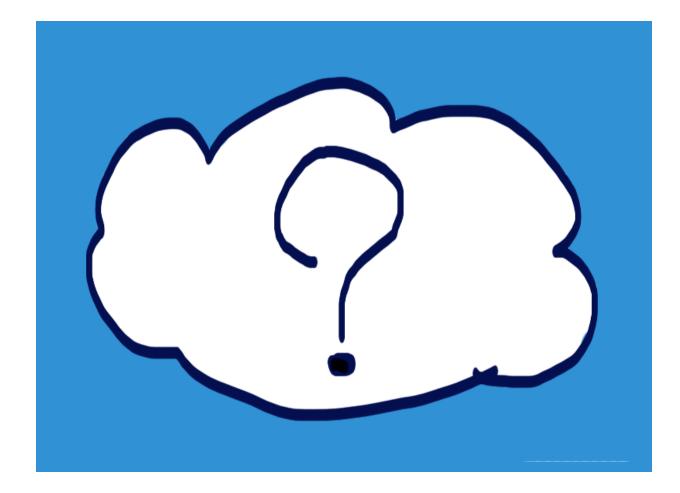
Cloud Architecture

How does it work?

10/100 - Link

Duplex

Gigabit

10/100 - Link

Duplex

25   26

1   3   5   7

2   4   6   8

traCore 3524
24-Port Auto-Uplink

10/100 - Link

Duplex   Gigabit

10/100 - Link
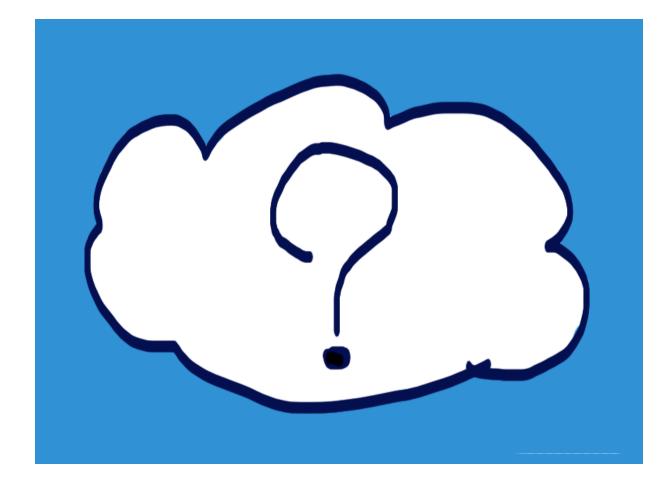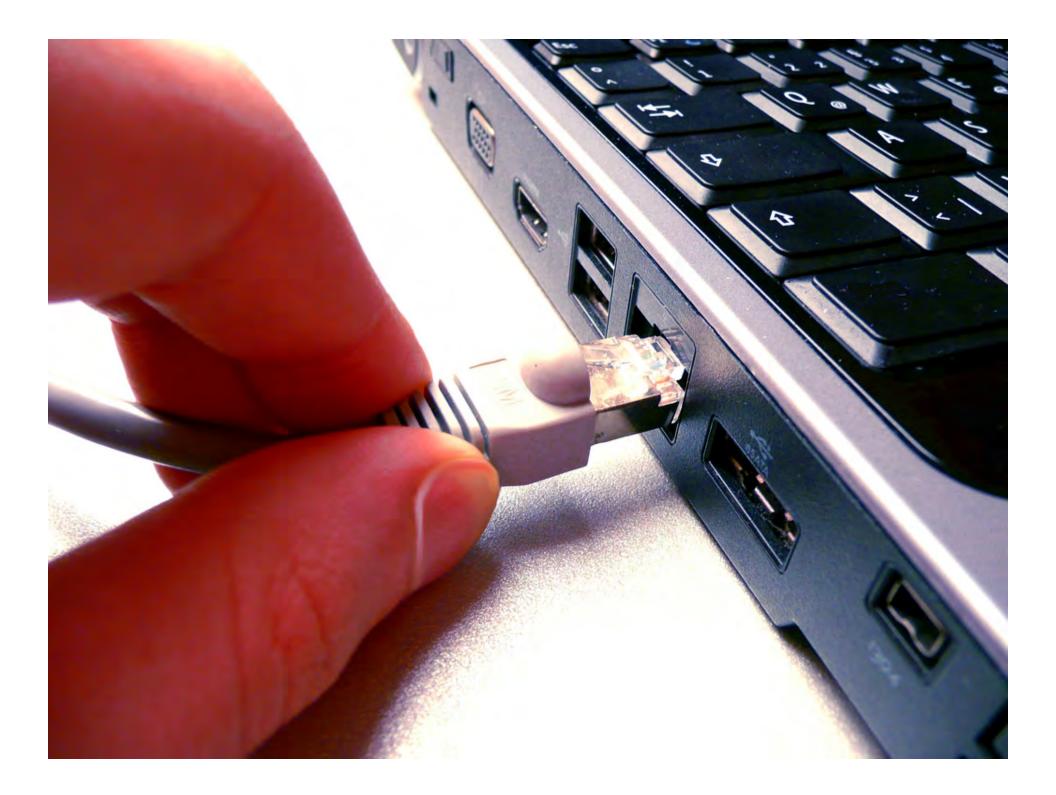
What does the Library need?

Types of Cloud Computing
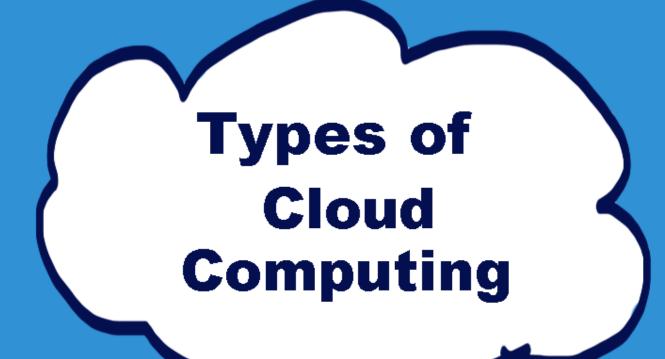
Software as a Service

Easier to Administer

Everyone has the Same Version

SaaS

Accessible from Anywhere

Collaboration is Easy

Software is Automatically Updated

Platform as a Service

Easier to Administer

Geographically Distributed Teams

PaaS

Services Obtained Worldwide

One Vendor, One Bill

Operating System is Automatically Updated

Infrastructure as a Service

Easier to Administer

Complete Desktop virtualization

IaaS

Dynamic Scaling

Policy-Based Services

Administrative Tasks are Automated

Development as a Service

Identity as a Service

Security

Types of Cyber Crime

Hacking
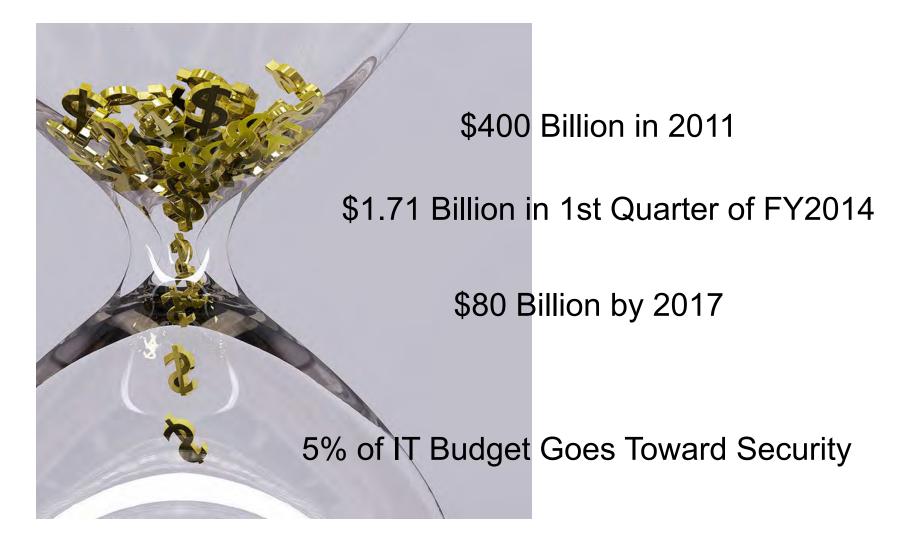
Identity Theft

Spam

Viruses

Cost of Crime

$400 Billion in 2011

$1.71 Billion in 1st Quarter of FY2014

$80 Billion by 2017

5% of IT Budget Goes Toward Security

Securing Data

Amazon Physical & Environmental Security

Generators

Uninterrupted Power Supply

Climate & Temperature Controls

Monitors

Electrical, Mechanical, & Life Support Systems & Equipment

Securing Data to the Cloud

Backup

Safety Net

License Confirmation

PROOF OF PURCHASE

This document confirms the
ASAP Software for the
will pr...

QUANTITY: 00000013
ASAP ITEM #: 1788386
MFG. ITEM #: E85-00
PRODUCT: VLA W
ALL

Introducing
Microsoft
Windows 95

For Distribution
with a new
TOSHIBA
PC only

For distribution with a new PC only
For product support, contact the manufacturer of your PC

Certificate of Authenticity

FOR PRODUCT SUPPORT, CONTACT THE MANUFACTURER OF YOUR COMPU
FOR DISTRIBUTION WITH NEW PC HARDWARE ONLY.

Product ID:
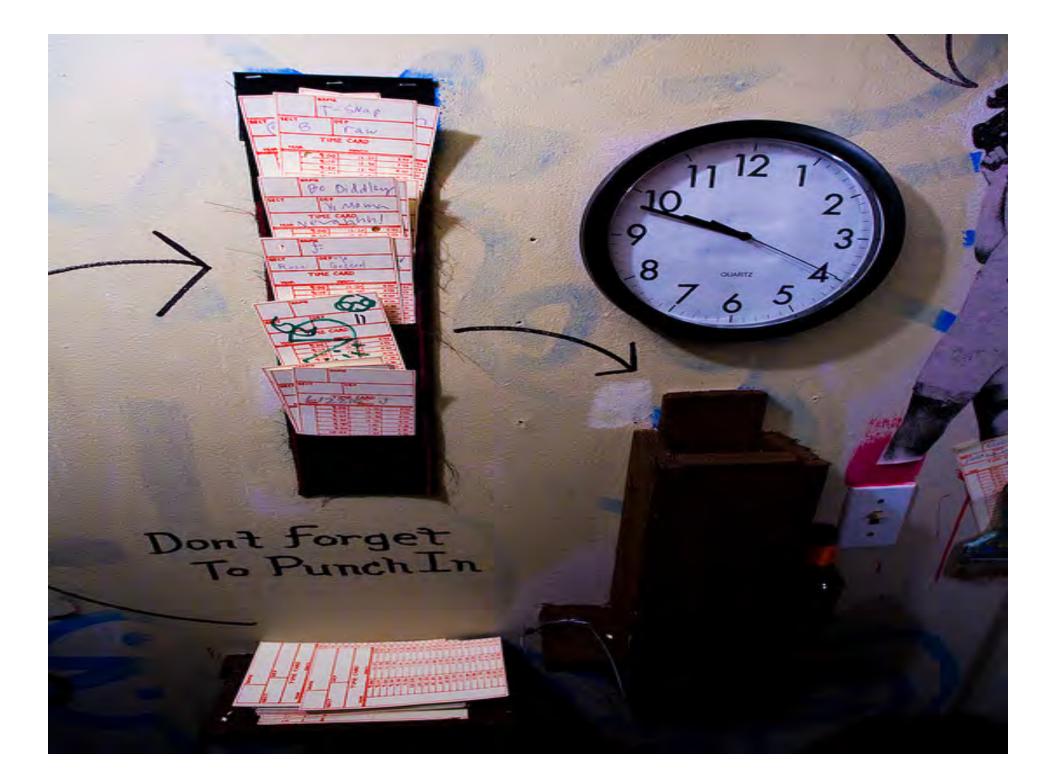
confirms the
for the products listed b
h the necessary pro

CLP 4.0
813

Pay as You Go

Pre-Pay
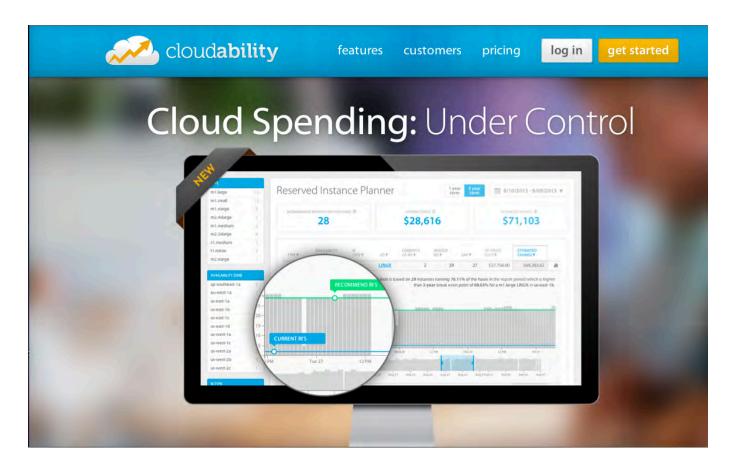
TechRepublic Comparison

Providers	Variety of Pricing Plans	Average Monthly Price	Cost Reductions / Optimizations Cost of Data Transfer - out (/GB)
Top-of-Mind			
Amazon (EC2)	Pay-as-you-go, year	$ 154.03	$ 0.250
Rackspace	Pay-as-you-go	$ 102.20	$ 0.180
GoGrid	Pay-as-you-go, month	$ 175.20	$ 0.120
Microsoft	Pay-as-you-go, semester	$ 116.80	$ 0.145
Terremark	Pay-as-you-go	$ 96.36	$ 0.170
IBM	Pay-as-you-go, year, semester	$ 211.70	$ 0.150
AT&T	Pay-as-you-go	$ 653.35	$ 0.100
Google	Pay-as-you-go	$ 105.85	$ 0.120
OpSource	Pay-as-you-go, monthly	$ 67.89	$ 0.150
Softlayer	Pay-as-you-go, monthly	$ 113.15	$ 0.100
HP	Pay-as-you-go	$ 58.40	$ 0.120
Upstarts			
Hosting.com	Monthly	$ 217.50	??
BitRefinery	Monthly	$ 71.20	$ 0.050
Lunacloud	Pay-as-you-go	$ 45.78	$ 0.104
Nephoscale	Pay-as-you-go, membership	$ 91.25	$ 0.100
Tier 3	Pay-as-you-go	$ 142.35	??

Thoran Rodrigues' Techrepublic Article: http://goo.gl/JVVlVd

Estimate Your Usage

https://cloudability.com/

Check Your Usage

This Month's Activity as of July 8, 2011

The billing cycle for this report is July 1 - July 31, 2011. The AWS service usage charges on this page currently show activity for all accounts through approximately 07/08/2011

Summary | Activity by Account

You can download a detailed activity report in Comma Separated Value (CSV) format.

Download Report

Expand All Services | Collapse All Services

Printer Friendly Version

		Totals
Amazon Elastic Compute Cloud		
US East (Northern Virginia) Region		
Amazon EC2 running Linux/UNIX Reserved Instances		
$0.03 per Small Instance (m1.small) instance-hour (or partial hour)	188 Hrs	5.64
Amazon EC2 running Linux/UNIX		
$0.085 per Small Instance (m1.small) instance-hour (or partial hour)	3 Hrs	0.26
Amazon EC2 EBS		
$0.10 per GB-month of provisioned storage	2.978 GB-Mo	0.30
$0.10 per 1 million I/O requests	519.963 IOs	0.05
$0.01 per 10,000 gets (when loading a snapshot)	14,336 Requests	0.01
	Download Usage Report ▸	6.26
Amazon Simple Storage Service		
	Download Usage Report ▸	0.05
AWS Data Transfer (excluding Amazon CloudFront)		
		0.01

Operational Costs

Salary + Benefits = Labor

Utilities

Rent

Software / Licensing

Monthly Labor

Salary & Benefits = $5,000

Time spent on task = 20%

$5,000 x .20 = $1,000

Adjustments

3 Temp workers

@ $5,000 each

$5,000 x 3 = $15,000

For 2 months

$15,000 x 2 = $30,000

Utilities

Electric company charges you $.10 per kwh

Kwh = Kilowatt Hour

1 Kilowatt = 1,000 watts

825 Watt Server
Runs 24/7

825 x 24 = 19,800 watts per Day

Divided by 1,000 = 19.8

19.8 x $.10 = $1.98 per day

= $60.22 / mo   =$722.70 / yr

Rent

= $5 per sq foot

Your Server room is 10' by 10'

10 x 10 = 100sq ft   x $5 = $500

Licensing

A mail exchange
Server = $1800/yr

Google mail
Server = $0
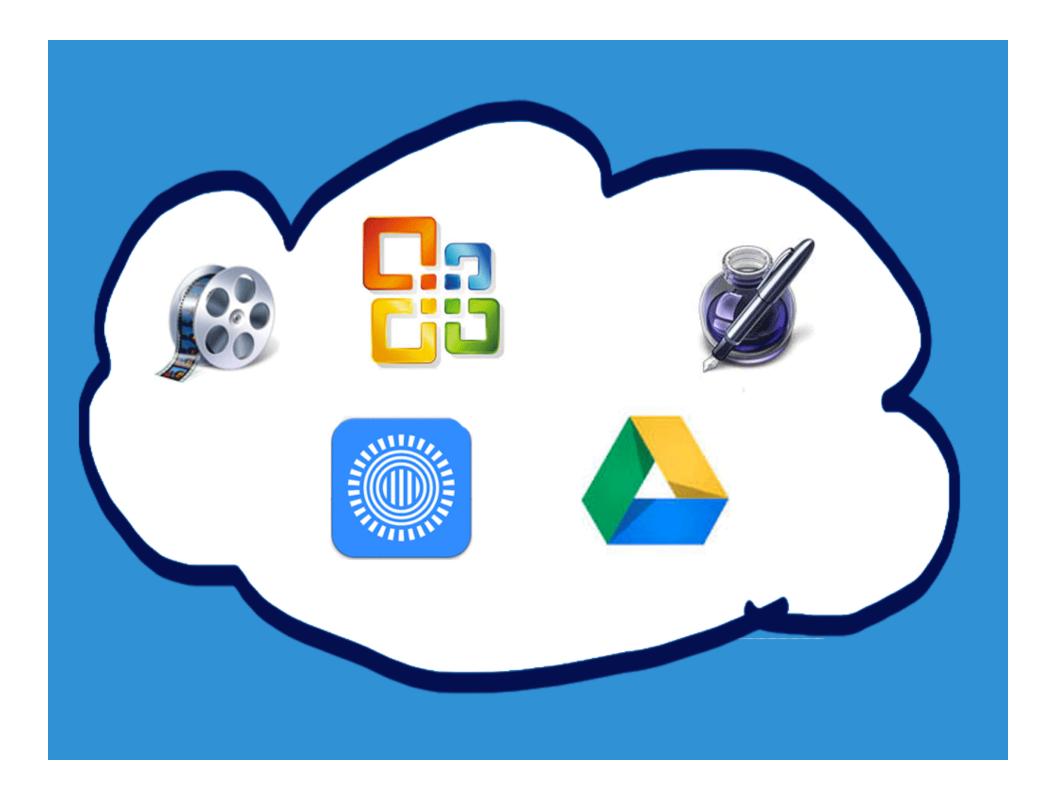
Does your library currently use the Cloud? (Choose all that apply)

A. Data Storage

B. Webmail

C. Media Streaming

D. OPAC

E. Other

What to Move?

Which Vendor?

False Claims Act (1863)

Social Security Act (1964)

Medicare and Medicaid Patient Protection
Act (1987)
aka Anti-Kickback Statute

Omnibus Budget Reconciliation Act
(1989)

Social Security Amendments
(1994)

Balanced Budget Act
(1995)

Compliance

Medicare Modernization Act
(2003)

Health Insurance Portability
and Accountability Act
(1996)

Deficit Reduction Act (2005)

Fraud Enforcement Recovery Act (2009)

American Recovery and Reinvestment Act (2009)

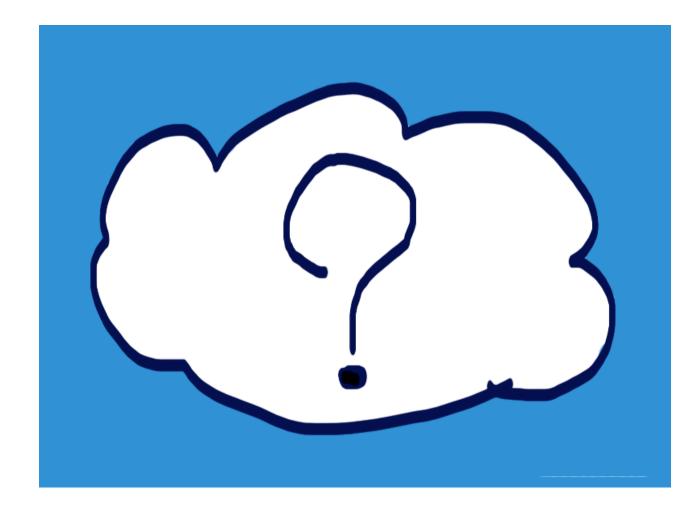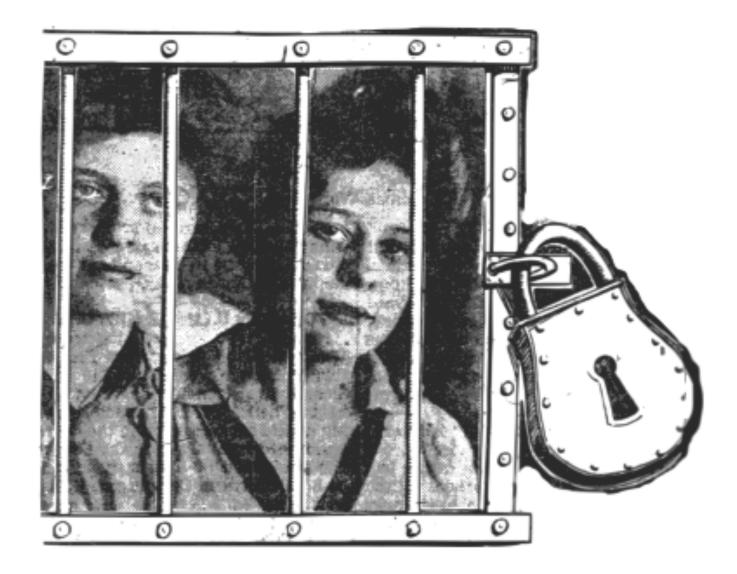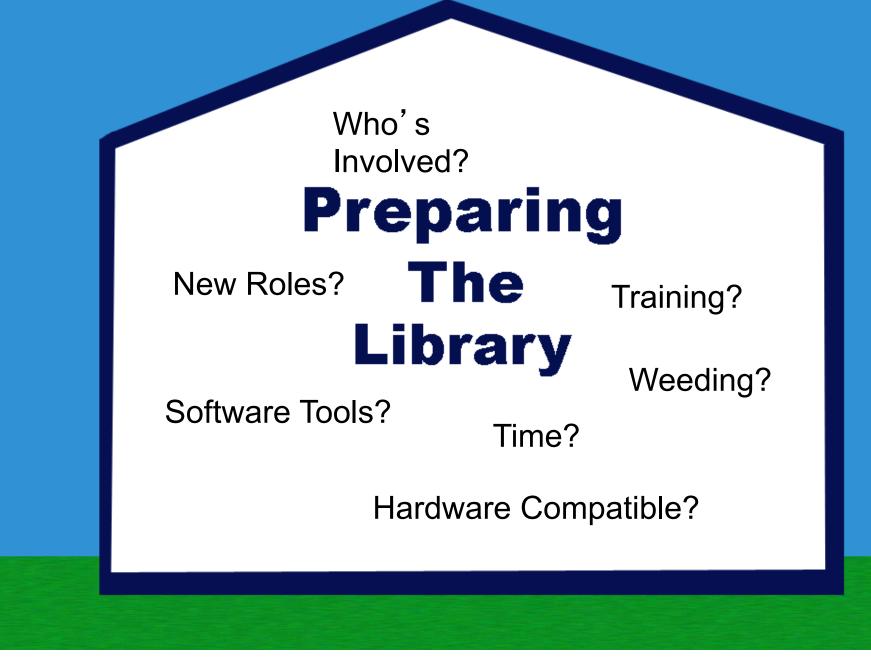# This Month's Activity as of July 8, 2011

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Expand All Services | Collapse All Services   **Printer Friendly Version**

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	Download Usage Report ▸		**6.26**
⊞ **Amazon Simple Storage Service**			
	Download Usage Report ▸		**0.05**
⊞ **AWS Data Transfer (excluding Amazon CloudFront)**			
			0.01

Who's
Involved?

**Preparing
The
Library**

New Roles?

Training?
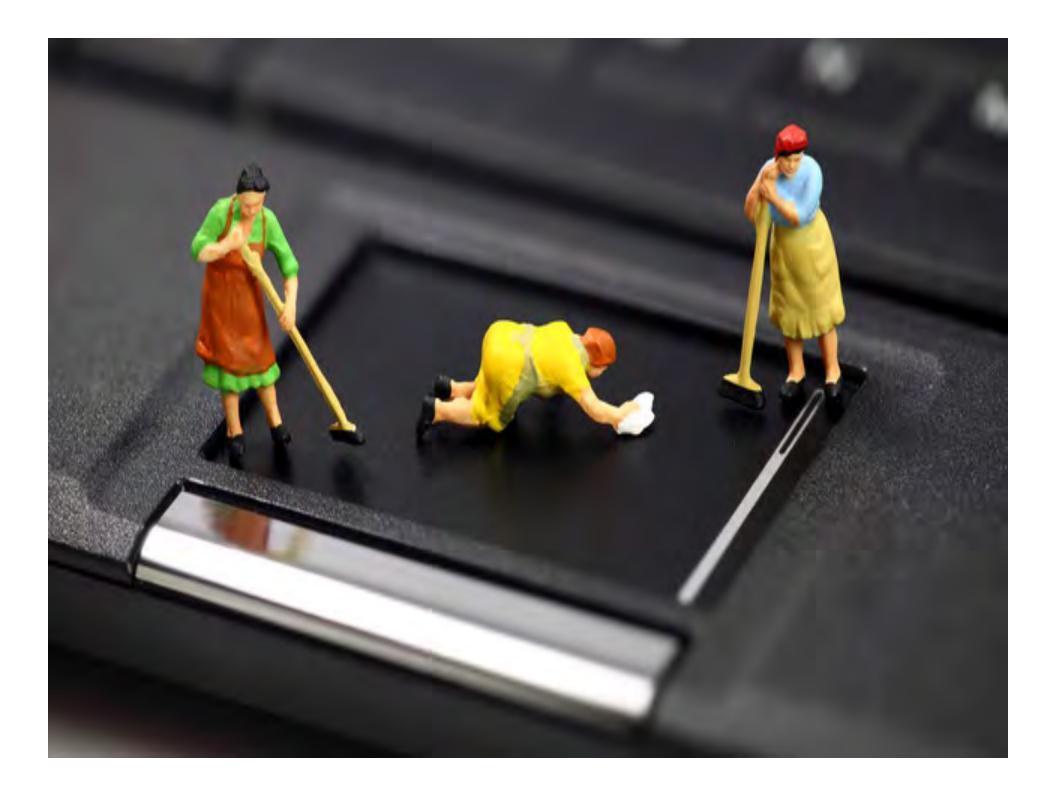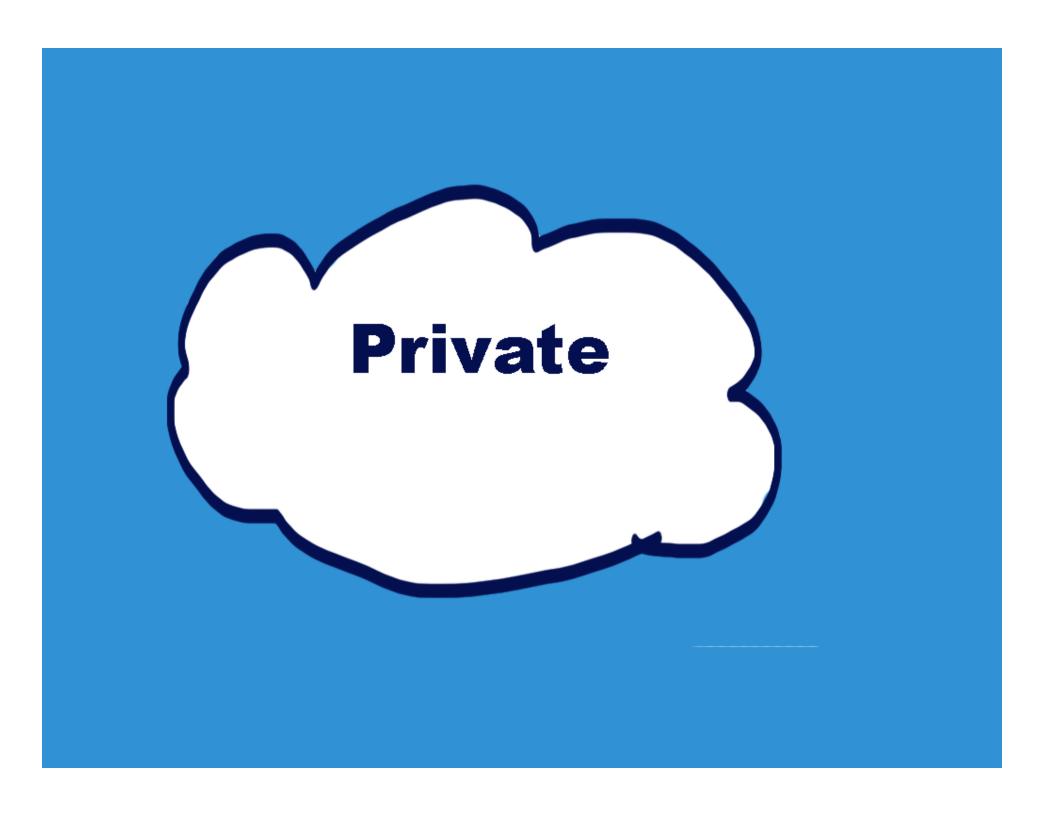
Weeding?

Software Tools?

Time?

Hardware Compatible?
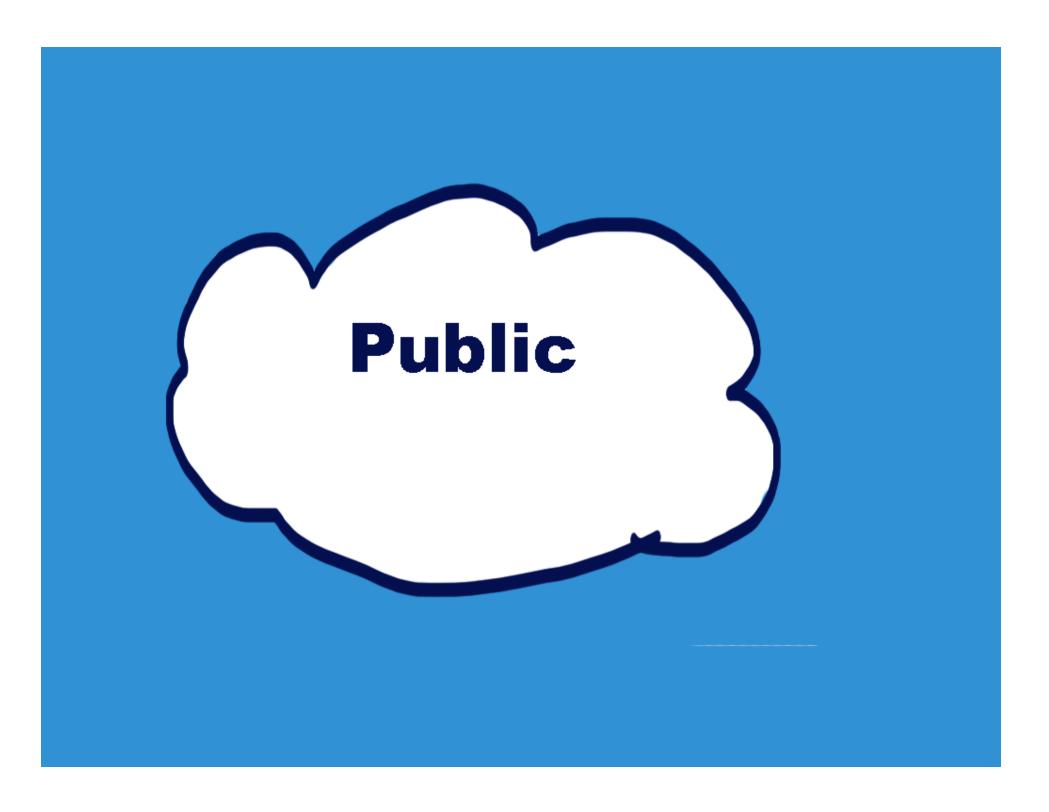
This Month's Activity as of July 8, 2011

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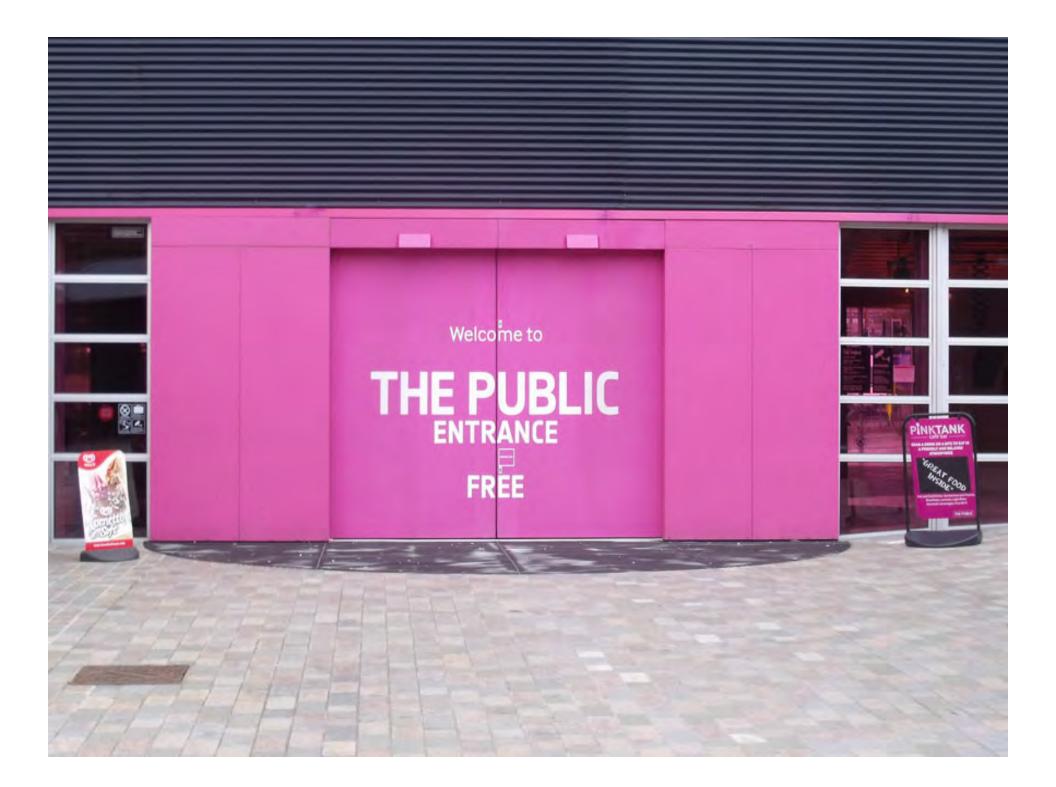
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		0.01

Sammamish
Beach Club

BEACH CLOSES AT DUSK
IN CASE OF EMERGENCY,
CALL 911 • ADDRESS:
2442 West Lake
Sammamish Blvd. SE

Private Property
Members Only

No Lifeguard
On Duty

Use at Your
Own Risk

KEEP GATE
LOCKED
AT ALL TIMES

Welcome to

THE PUBLIC
ENTRANCE

FREE

PINKTANK
café bar

GREAT FOOD
INSIDE

Questions?

Thank you.

Rita Gavelis

rita@libassist.com

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helping libraries think differently