Cloud Computing

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www.hiren.info

https://www.ne

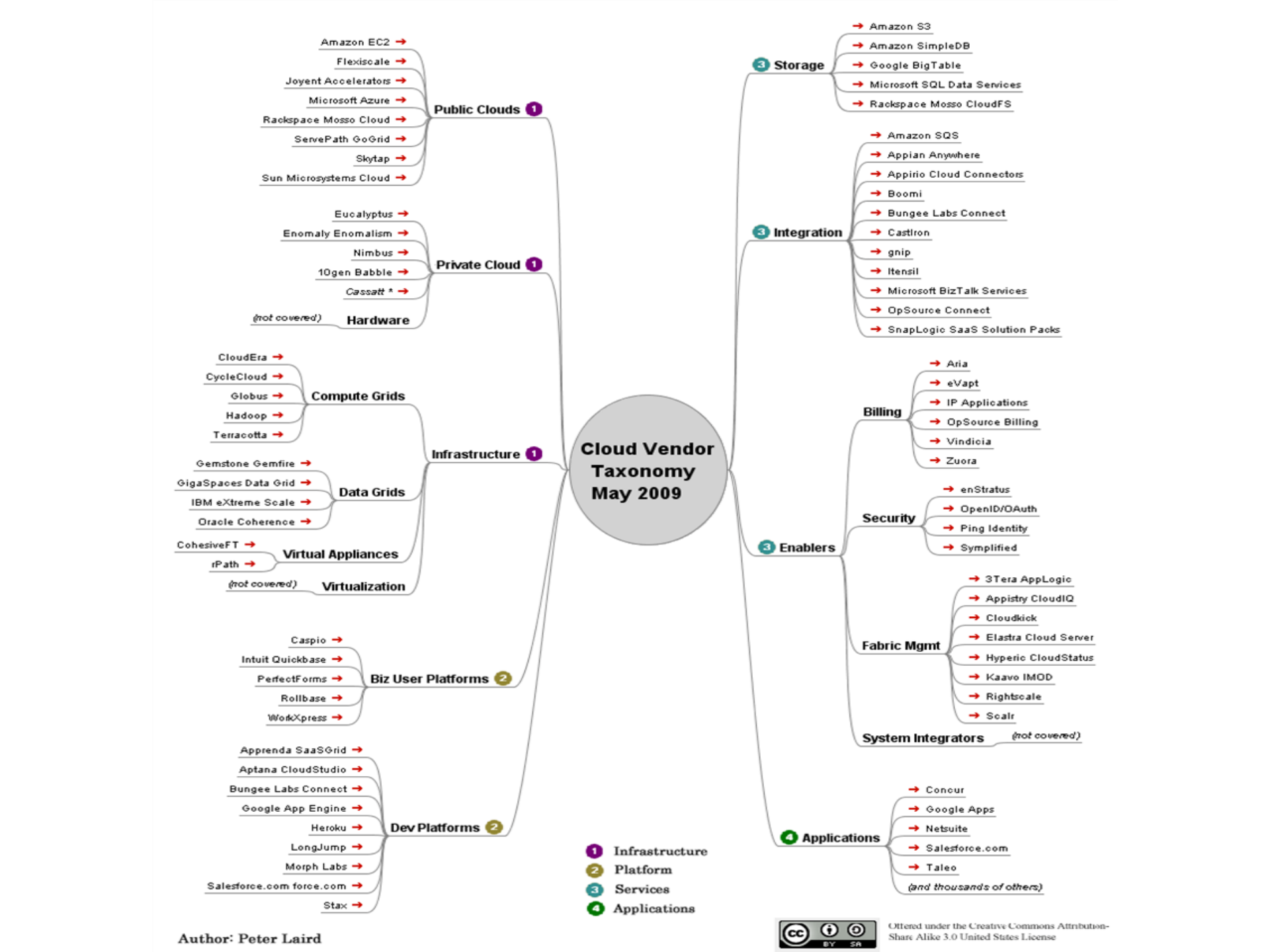
HPC

HTC

SAAS

PAAS

IAAS


Cloud Vendor Taxonomy May 2009
Infrastructure
Public Clouds
Amazon EC2
Flexiscale
Joyent Accelerators
Microsoft Azure
Rackspace Mosso Cloud
ServePath GoGrid
Skytap
Sun Microsystems Cloud
Private Cloud
Eucalyptus
Enomaly Enomalism
Nimbus
10gen Babble
Cassatt *
Hardware
(not covered)
Compute Grids
CloudEra
CycleCloud
Globus
Hadoop
Terracotta
Data Grids
Gemstone Gemfire
GigaSpaces Data Grid
IBM eXtreme Scale
Oracle Coherence
Virtual Appliances
CohesiveFT
rPath
Virtualization
(not covered)
Platform
Biz User Platforms
Caspio
Intuit Quickbase
PerfectForms
Rollbase
WorkXpress
Dev Platforms
Apprenda SaaSGrid
Aptana CloudStudio
Bungee Labs Connect
Google App Engine
Heroku
LongJump
Morph Labs
Salesforce.com force.com
Stax
Services
Storage
Amazon S3
Amazon SimpleDB
Google BigTable
Microsoft SQL Data Services
Rackspace Mosso CloudFS
Integration
Amazon SQS
Appian Anywhere
Appirio Cloud Connectors
Boomi
Bungee Labs Connect
CastIron
gnip
Itensil
Microsoft BizTalk Services
OpSource Connect
SnapLogic SaaS Solution Packs
Enablers
Billing
Aria
eVapt
IP Applications
OpSource Billing
Vindicia
Zuora
Security
enStratus
OpenID/OAuth
Ping Identity
Symplified
Fabric Mgmt
3Tera AppLogic
Appistry CloudIQ
Cloudkick
Elastra Cloud Server
Hyperic CloudStatus
Kaavo IMOD
Rightscale
Scalr
System Integrators
(not covered)
Applications
Concur
Google Apps
Netsuite
Salesforce.com
Taleo
(and thousands of others)
1 Infrastructure
2 Platform
3 Services
4 Applications
Author: Peter Laird
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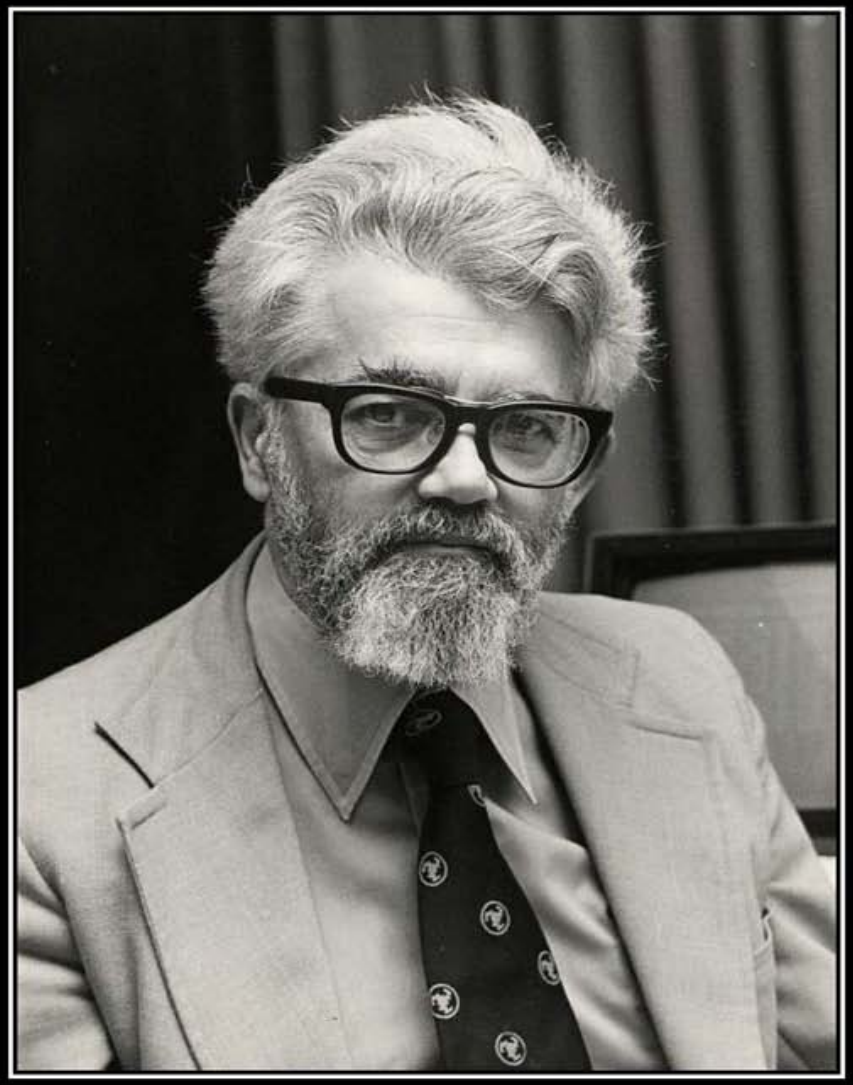
IT STINKS!



PROGRAMMING

You're Doing It Completely Wrong.

TIME SHARING

LOUDCLOUD

ASPs

DCOM

.NET

AUTONOMIC COMPUTING

SAAS

PAAS

IAAS

P v I

GOOD

FAST

CHEAP

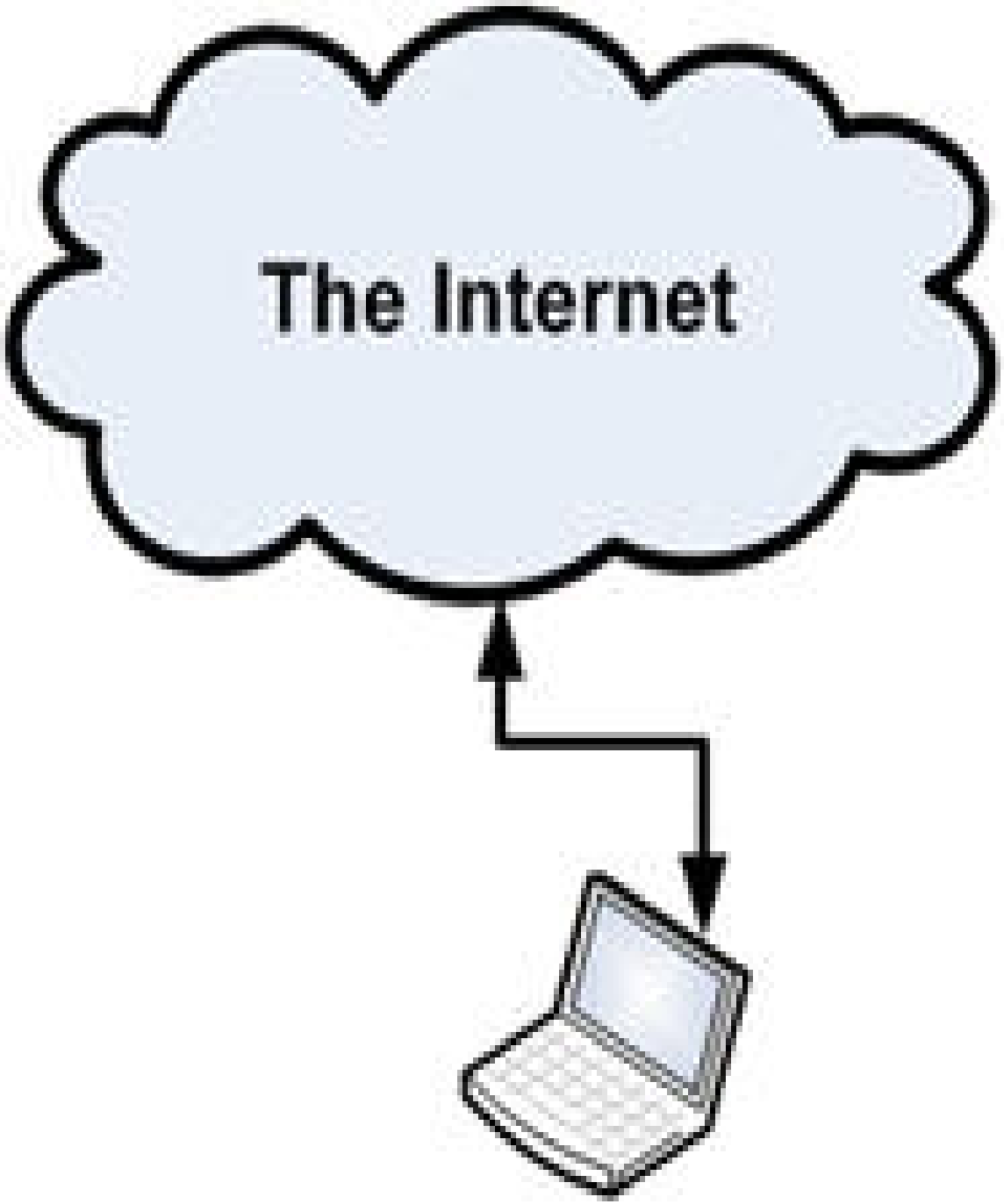
MACHINE IMAGE

Marrow Stroma
Gene Delivery
Bone
Cardiac Muscle
Adipose
STEM CELLS
Cartilage
Tendon & Ligament
Biopharmaceuticals

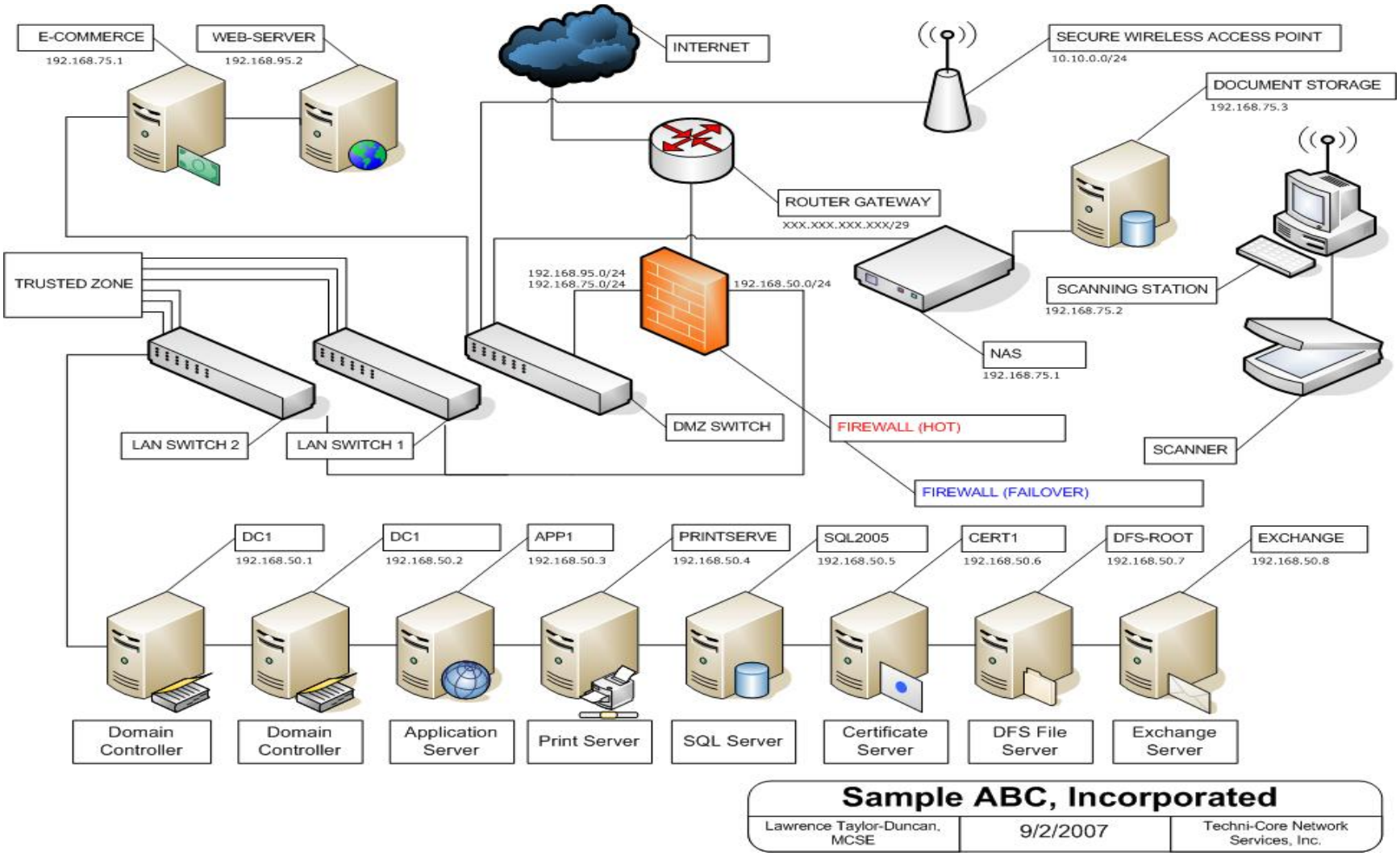
ZENITH
ZENITH

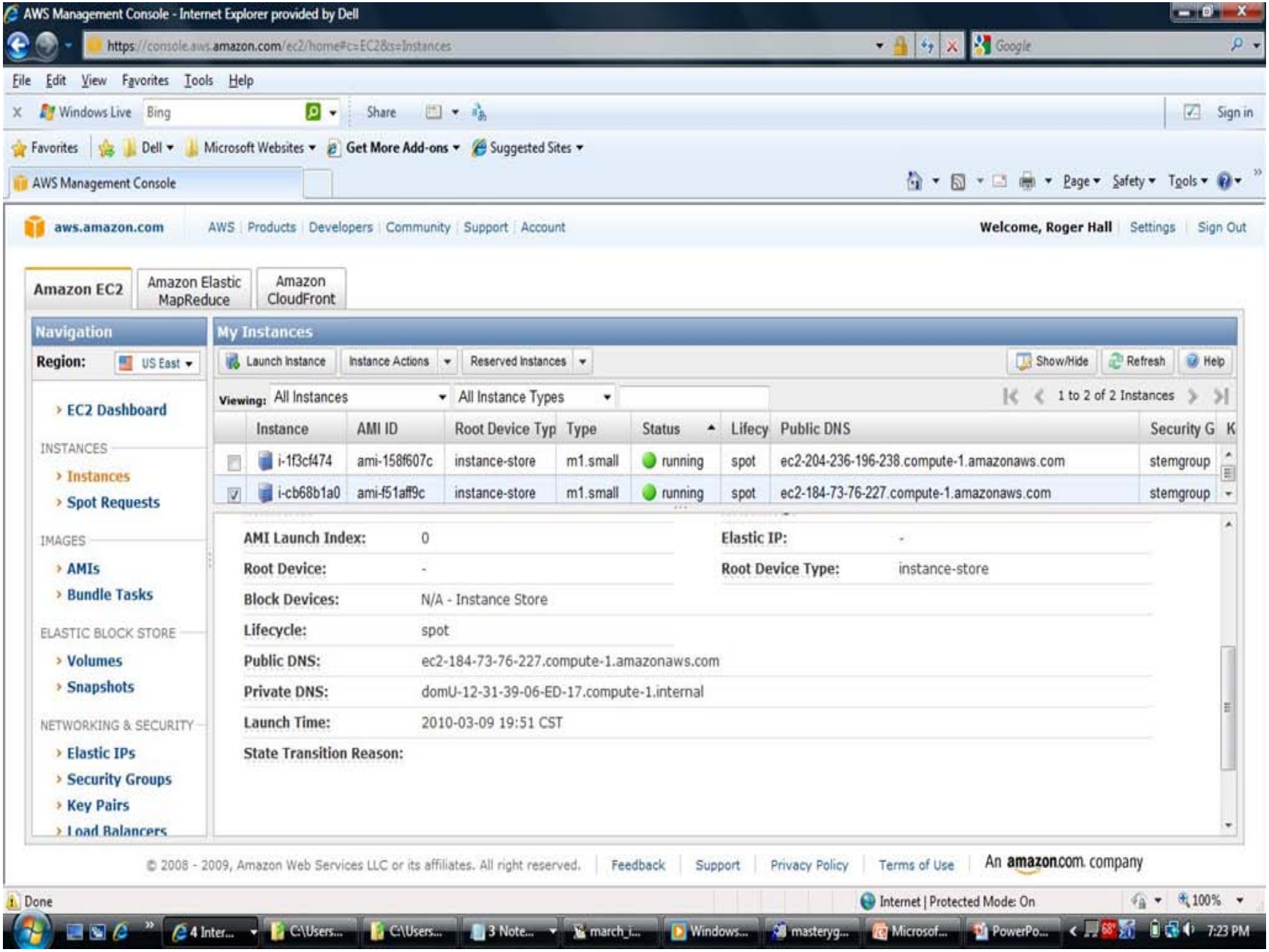
PEW

PEW


The Internet

OUT THERE


E-COMMERCE
192.168.75.1
WEB-SERVER
192.168.95.2
INTERNET
SECURE WIRELESS ACCESS POINT
10.10.0.0/24
DOCUMENT STORAGE
192.168.75.3
ROUTER GATEWAY
XXX.XXX.XXX.XXX/29
TRUSTED ZONE
192.168.95.0/24
192.168.75.0/24
192.168.50.0/24
SCANNING STATION
192.168.75.2
NAS
192.168.75.1
LAN SWITCH 2
LAN SWITCH 1
DMZ SWITCH
FIREWALL (HOT)
SCANNER
FIREWALL (FAILOVER)
DC1
192.168.50.1
DC1
192.168.50.2
APP1
192.168.50.3
PRINTSERVE
192.168.50.4
SQL2005
192.168.50.5
CERT1
192.168.50.6
DFS-ROOT
192.168.50.7
EXCHANGE
192.168.50.8
Domain Controller
Domain Controller
Application Server
Print Server
SQL Server
Certificate Server
DFS File Server
Exchange Server
Sample ABC, Incorporated
Lawrence Taylor-Duncan, MCSE
9/2/2007
Techni-Core Network Services, Inc.


AWS Management Console - Internet Explorer provided by Dell
https://console.aws.amazon.com/ec2/home#c=EC2&s=Instances
File Edit View Favorites Tools Help
Windows Live Bing Share Sign in
Favorites Dell Microsoft Websites Get More Add-ons Suggested Sites
AWS Management Console
Page Safety Tools
aws.amazon.com AWS Products Developers Community Support Account
Welcome, Roger Hall Settings Sign Out
Amazon EC2
Amazon Elastic MapReduce
Amazon CloudFront
Navigation
Region: US East
EC2 Dashboard
INSTANCES
Instances
Spot Requests
IMAGES
AMIs
Bundle Tasks
ELASTIC BLOCK STORE
Volumes
Snapshots
NETWORKING & SECURITY
Elastic IPs
Security Groups
Key Pairs
Load Balancers
My Instances
Launch Instance
Instance Actions
Reserved Instances
Show/Hide
Refresh
Help
Viewing: All Instances
All Instance Types
1 to 2 of 2 Instances
Instance
AMI ID
Root Device Typ
Type
Status
Lifecy
Public DNS
Security G
i-1f3cf474 ami-158f607c instance-store m1.small running spot ec2-204-236-196-238.compute-1.amazonaws.com stemgroup
i-cb68b1a0 ami-f51aff9c instance-store m1.small running spot ec2-184-73-76-227.compute-1.amazonaws.com stemgroup
AMI Launch Index: 0
Elastic IP: -
Root Device: -
Root Device Type: instance-store
Block Devices: N/A - Instance Store
Lifecycle: spot
Public DNS: ec2-184-73-76-227.compute-1.amazonaws.com
Private DNS: domU-12-31-39-06-ED-17.compute-1.internal
Launch Time: 2010-03-09 19:51 CST
State Transition Reason:
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Feedback Support Privacy Policy Terms of Use
An amazon.com company
Done
Internet | Protected Mode: On
100%
7:23 PM

LOCATION

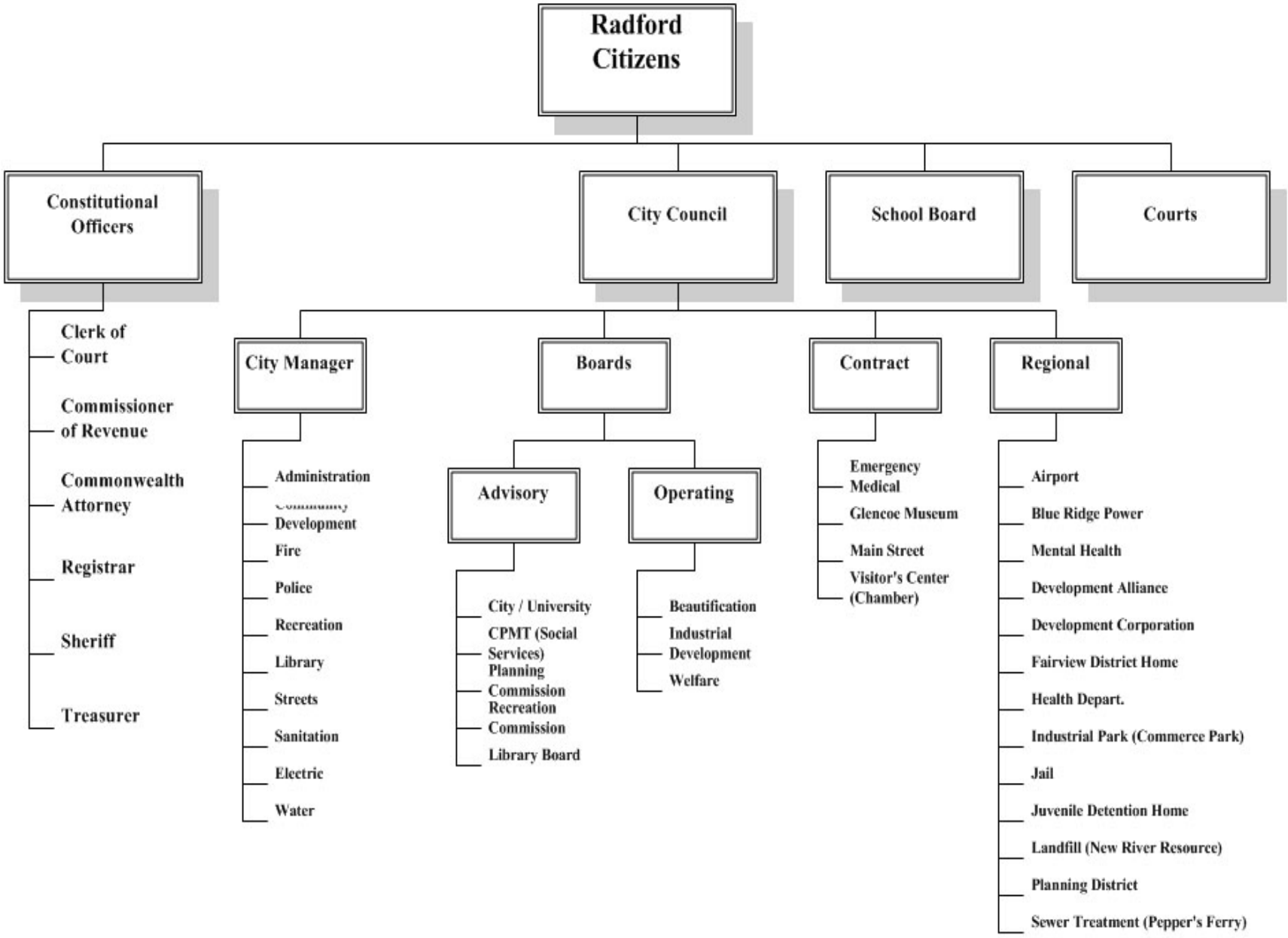
LOCATION

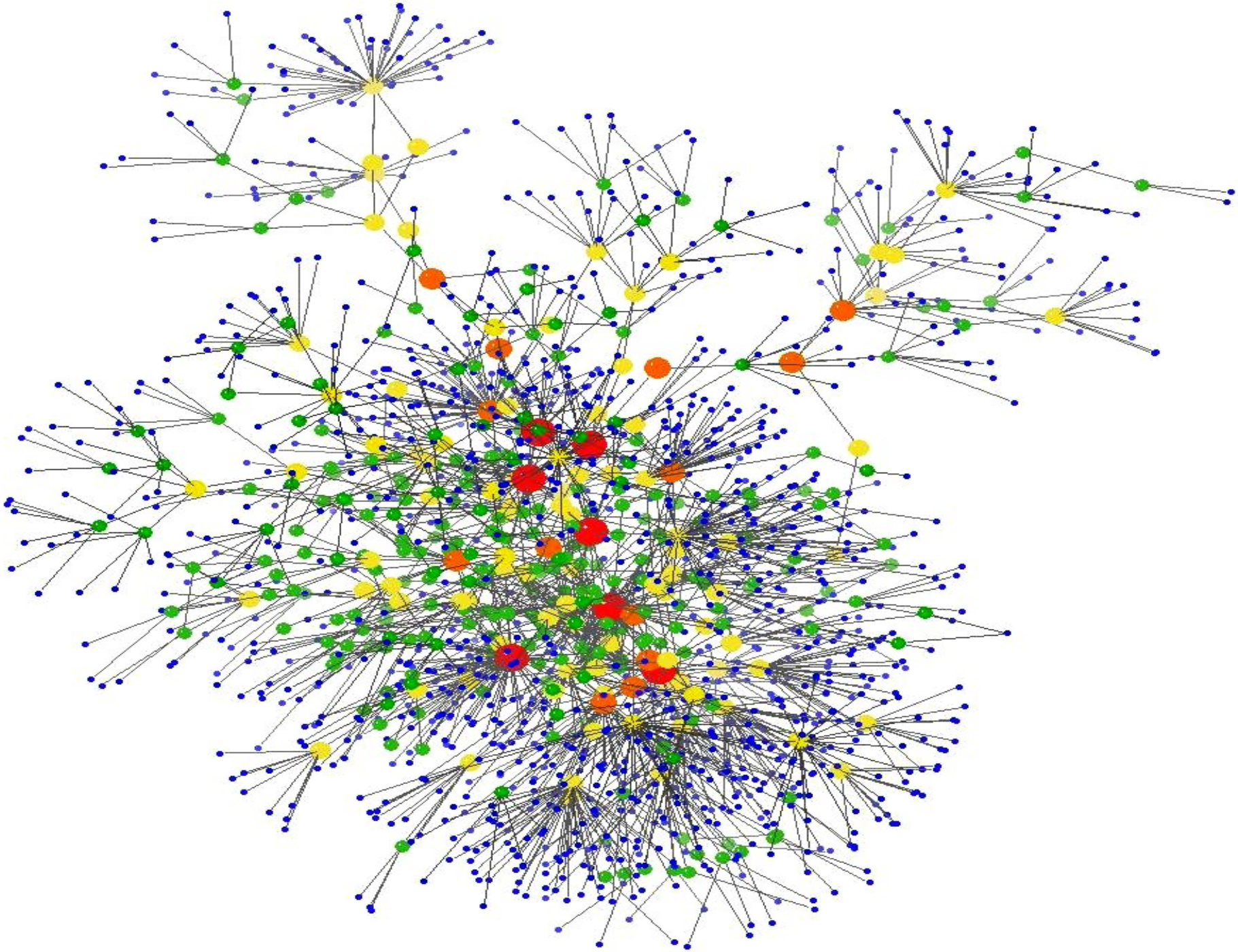
LOCATION

SLA

https://www.ne

BUTTL

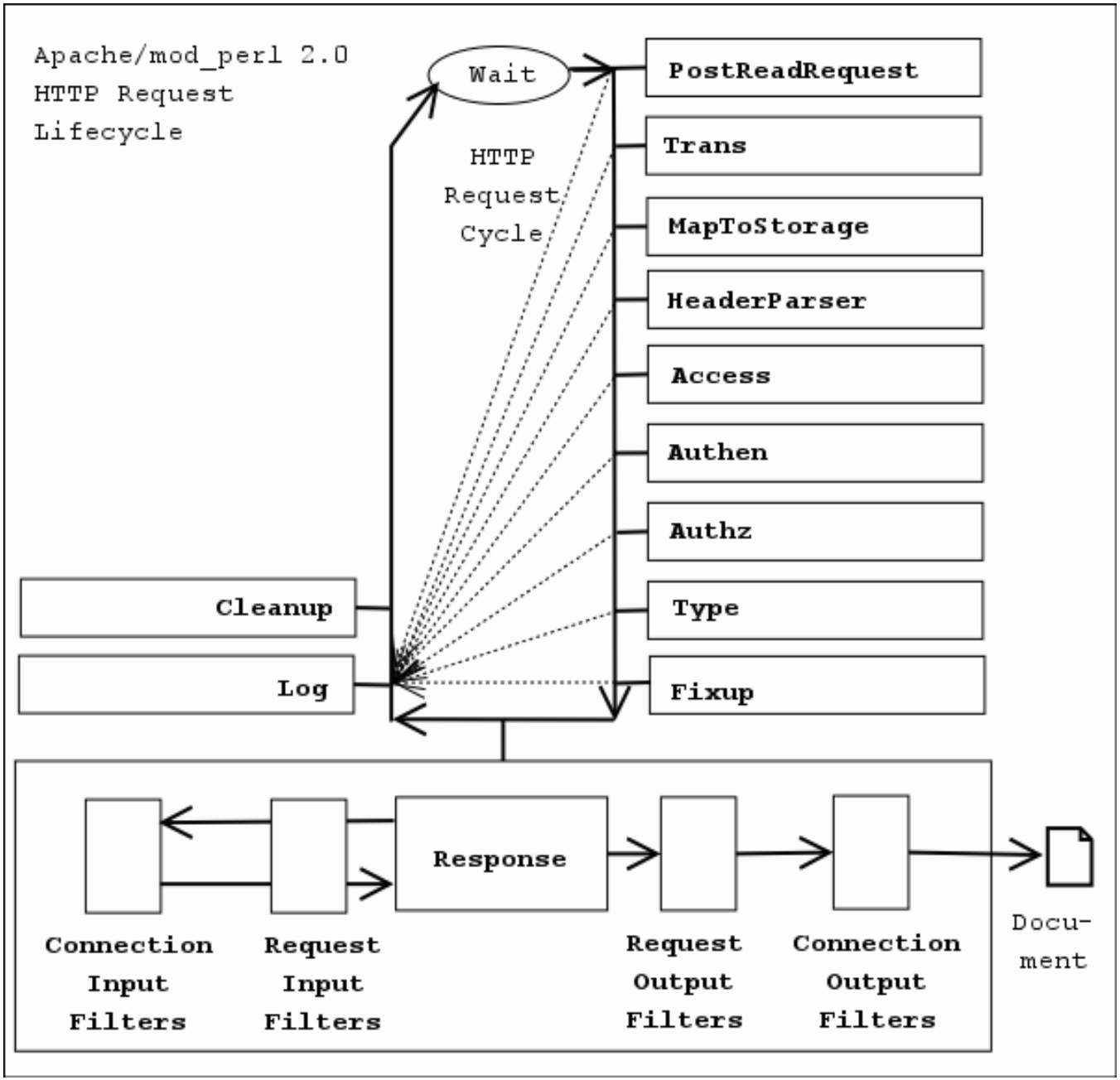

Radford Citizens
Constitutional Officers
City Council
School Board
Courts
Clerk of Court
Commissioner of Revenue
Commonwealth Attorney
Registrar
Sheriff
Treasurer
City Manager
Boards
Contract
Regional
Administration
Development
Fire
Police
Recreation
Library
Streets
Sanitation
Electric
Water
Advisory
Operating
City / University
CPMT (Social Services)
Planning Commission
Recreation Commission
Library Board
Beautification
Industrial Development
Welfare
Emergency Medical
Glencoe Museum
Main Street
Visitor's Center (Chamber)
Airport
Blue Ridge Power
Mental Health
Development Alliance
Development Corporation
Fairview District Home
Health Depart.
Industrial Park (Commerce Park)
Jail
Juvenile Detention Home
Landfill (New River Resource)
Planning District
Sewer Treatment (Pepper's Ferry)



No. 77-10" ALLOY

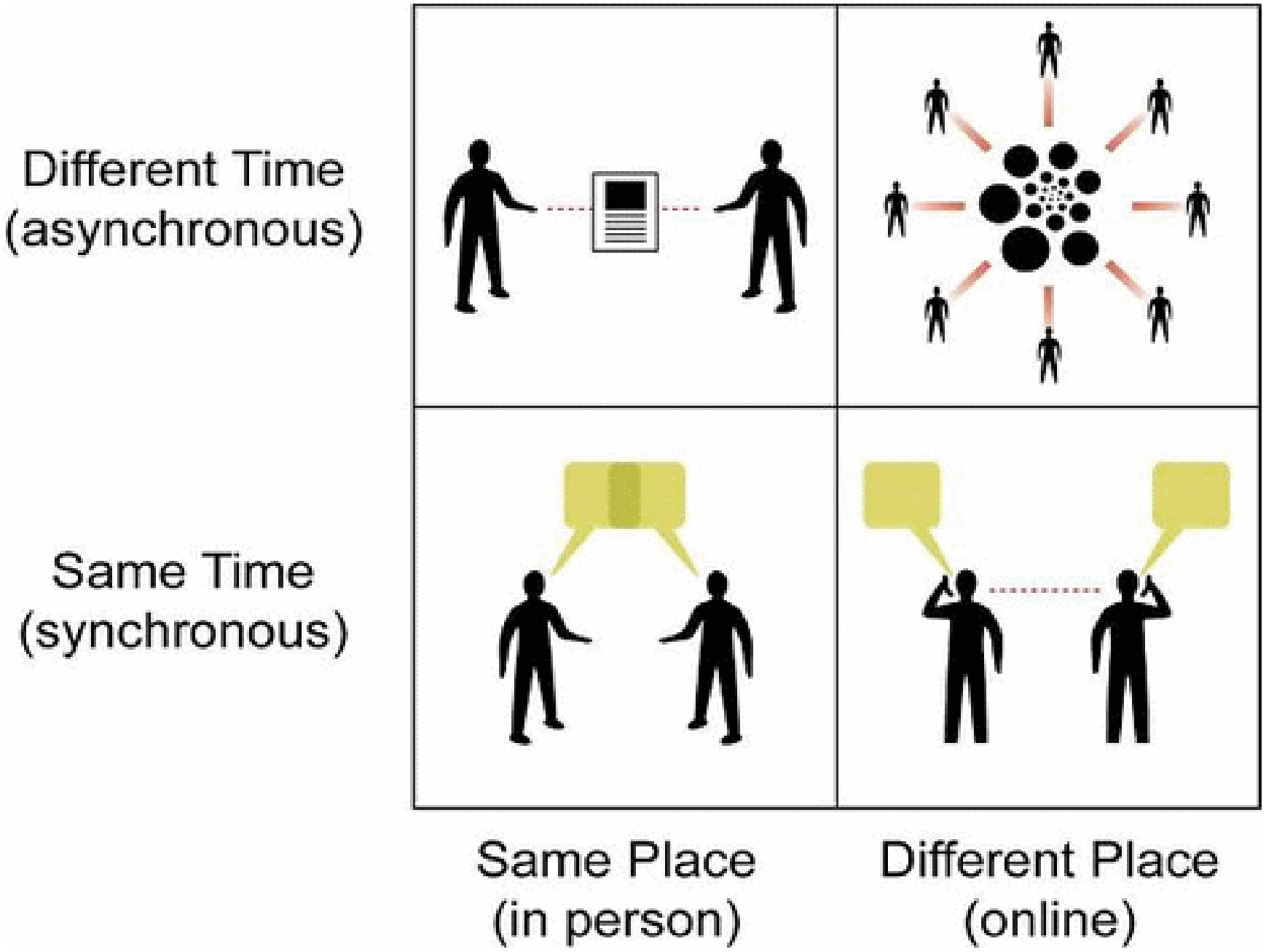
COMMUNICATE

REASON


Apache/mod_perl 2.0
HTTP Request
Lifecycle
Wait
HTTP
Request
Cycle
PostReadRequest
Trans
MapToStorage
HeaderParser
Access
Authen
Authz
Type
Fixup
Cleanup
Log
Response
Connection
Input
Filters
Request
Input
Filters
Request
Output
Filters
Connection
Output
Filters
Docu-
ment

FAST

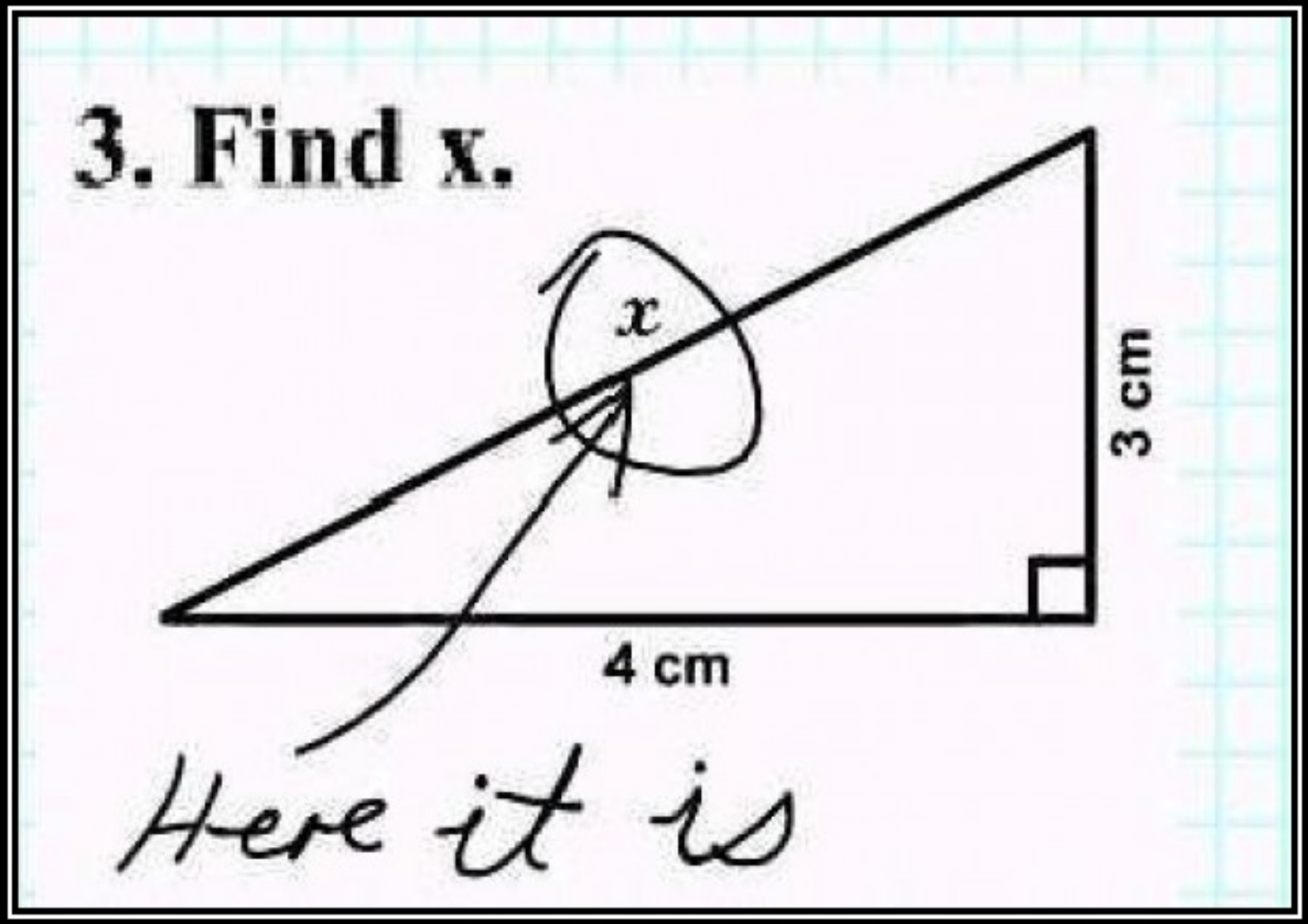
CHEAP


Different Time
(asynchronous)
Same Time
(synchronous)
Same Place
(in person)
Different Place
(online)

I WANT YOU
TO TAKE
A NUMBER

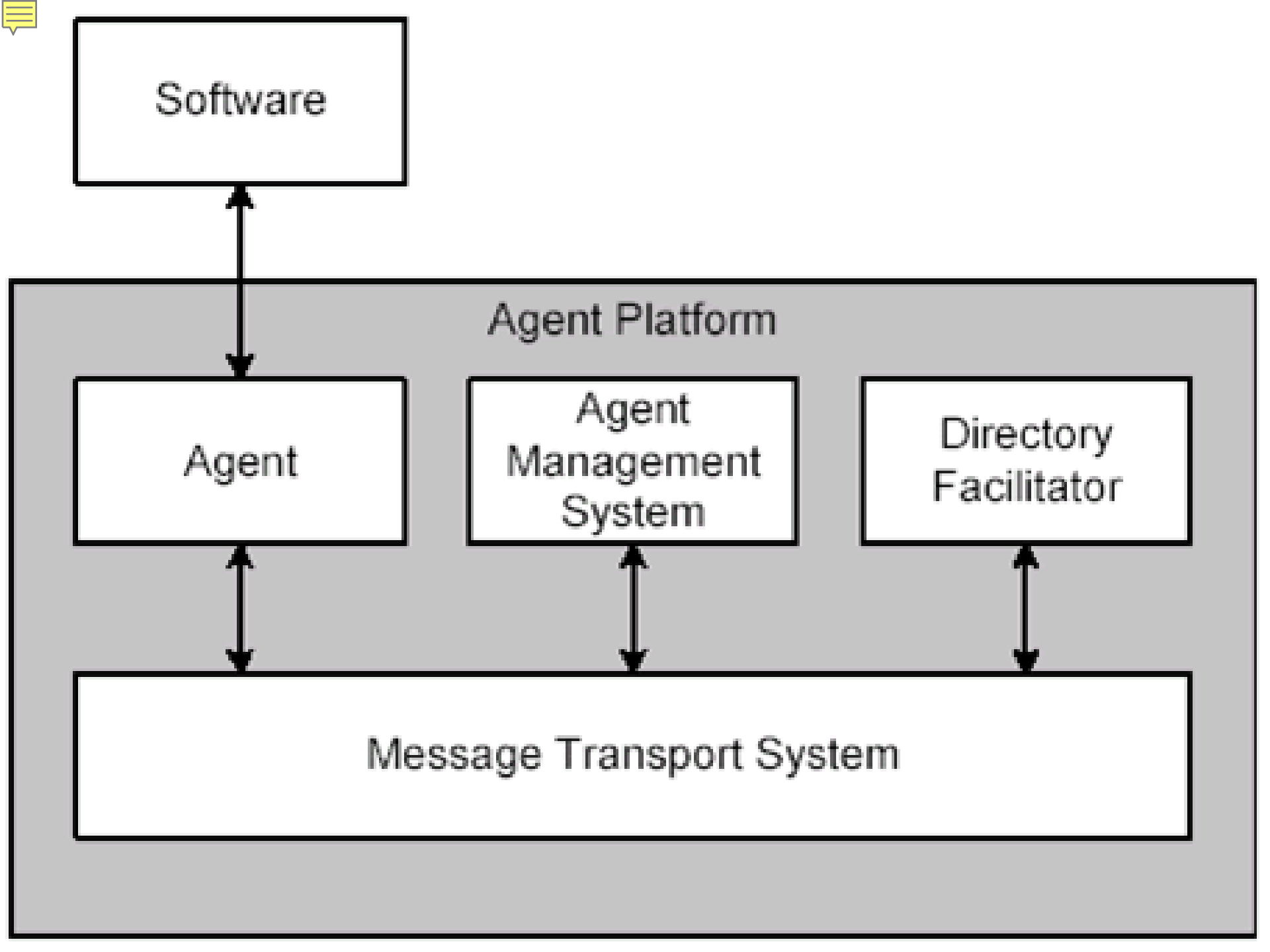
NOW SERVING
99
PLEASE Take A Number
PLEASE Take A Number

COMPLAINT DEPT.
TAKE A NUMBER



SIMPLICITY

The simplest solutions are often the cleverest
They are also usually wrong

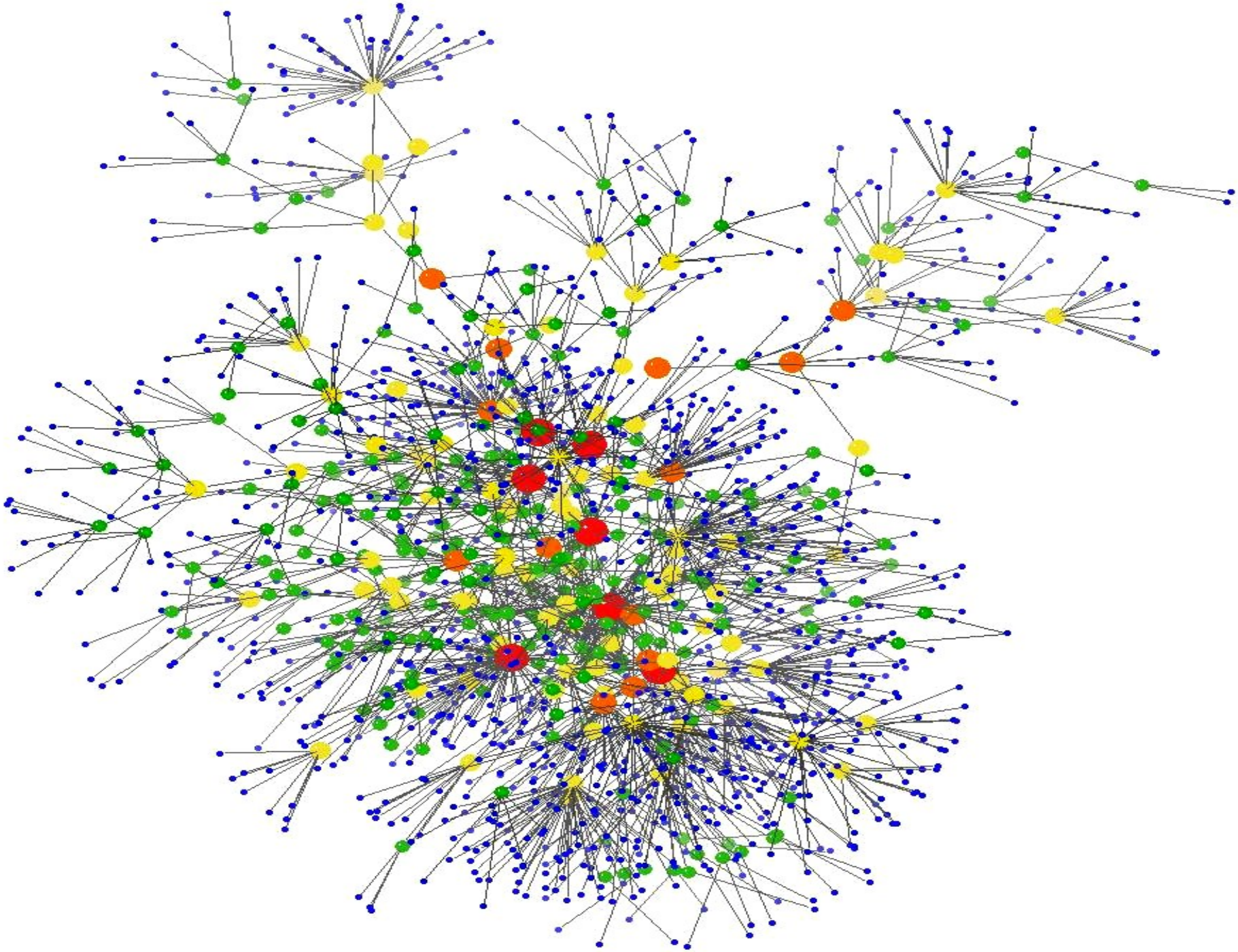

Software
Agent Platform
Agent
Agent Management System
Directory Facilitator
Message Transport System

COMMUNICATE

REASON

REACTIVE

PROACTIVE

AUTONOMIC COMPUTING

MACHINE IMAGE