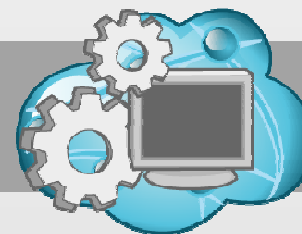




Infrastructure Management and Cloud

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CEO Radix Technologies

Infrastructure Management and Cloud



IaaS

- Cloud Infrastructure Services
- Private Cloud

Reduce Cost of Infrastructure

- How does IaaS Reduce Cost?

Reduce Complexity of Infrastructure

- How does IaaS Reduce Complexity?

Radix Technologies and IaaS



How We Moved into IaaS

- What drove us in this direction
- The problems we were trying to solve

How We Removed Costs + Complexity

- Where we saw reductions in Cost + Complexity
- How we were able to get these reductions

Customer Example

- We started using Cloud when we were trying to make a customer's IT more efficient

Customer Example



It all started in 2007

- Supporting a customer with locations in 40+ Countries
- All their offices are located from Eastern Europe to Asia

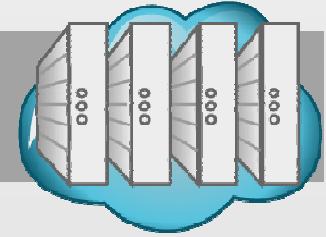
IT Distributed over 4 Regions

- Eastern Europe, Russia + CIS, Middle East, Asia
- Requirements and Vendors varied in each region

Applications

- Linux and Windows Environments
- 1 Very Large ERP App used by all offices
- Large number of smaller apps used regionally

Infrastructure



Fairly Typical Configuration

- X86 Servers from the large vendors
- SAN and NAS arrays for Storage

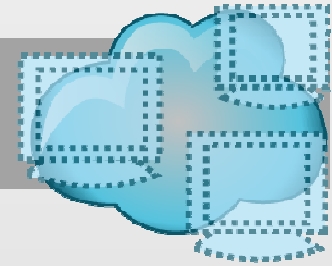
Hardware Differed Regionally

- Each Region bought it's own hardware
- Required different specialized staff in each region

Virtualization

- Some of the Test and Development Servers had been Virtualized
- No production applications had been Virtualized
- Mostly used by IT

Virtualization



We were still managing Hardware

- We were still looking at an Application and selecting hardware for it
- We were still assigning hardware to a specific customer

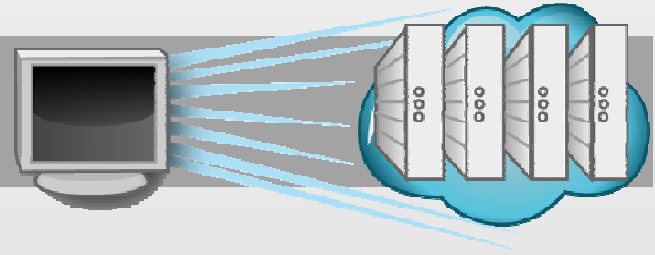
Still required local highly skilled staff

- We needed to train and specialize staff to be able to use the solution in all locations that would use it

The Complexity Was Still There

- The IT staff had added another level of management
- Some tasks could be managed by adding additional software which increased costs
- Required big changes in our IT processes

Conversion to Cloud



Applogic

- We found Applogic from 3Tera/CA Technologies
- A tool that sits on top of the virtualization layer

Virtualize Entire Infrastructure

- It does not just deal with the application server but with all the infrastructure needed to run an application.
- Create Firewalls, Load Balancers, Web Servers, DB Servers and all other in an N-Tier application

Build Applications Using a Canvas

- All this is done through a web based interface
- Drag and Drop the different infrastructure on a canvas to create an app
- Select from a large number of prebuilt appliances or create your own

AppLogic

sfgov1 - Application Editor - sandiego - 3Tera AppLogic - Mozilla Firefox

https://sandiego.3tera.net/applogic/editor.html

Application Edit Assembly Appliance Tools Help

system AppLogic

Beta

L3LB TOMCAT PGSQL64

TOMCAT64

Database Appliances

MYSQL5 MYSQLR PGSQL

MYSQL64

Gateways

INSSL NET OUT

IN INSSLR

Generic

LUX64 OSOL64 LINUXS

LINUX64 LUX5

Misc. Appliances

Production Environment

Q&A Environment

Aux Infrastructure

Note: after installing prod.pem, qa.pem and log.pem on the ssl_keys volume, change the l7_accept property of each INSSL from "html" to "both" in order to enable https

Note: before modifying an appliance (or immediately after), make sure it is branched in order not to lose your changes. Once done with the changes, you can move it back in the catalog

Note: after making changes to the architecture or configuration, an app restart is needed for the changes to take effect.

Note: PGSQL2's fs terminal uses cifs, not

This application is not ready to start. 5 mandatory volumes are not configured

UK: Wed 23:29 US Pacific: Wed 15:29 Hong Kong: Thu 06:29 GMT/UTC: Wed 22:29 South Africa: Thu 00:29 Queensland: Thu 08:29 India: Thu 03:59 Done sandiego.3tera.net

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Reduced Costs



Centralize all Expertise in 1 place

- Local staff needed only minimal skills to be able to install and manage hardware
- Cloud Operators and Architects could do their work remotely

Improved Response Time from IT

- The availability of the resources result in increased agility
- Servers were being turned on in a matter of minutes
- Applications were being assembled in hours instead of days

Benefits of Virtualization

- Hardware Utilization increased
- Downtime decreased substantially
- Offered a low cost disaster recovery solution

Reduced Complexity



Manage Application Hardware from Web

- Everything is now done in the web interface
- No need for a large number of staff to work on a single app.

Reduce Complexity in Datacenter

- One single hardware configuration in the datacenter
- No complex networking requirements
- No need to touch the hardware

Template Applications

- Availability of a large number of pre built servers
- Create your own appliances and templates to reuse

IaaS



No More Dedicated Hardware

- We no longer have to deal with a business unit approving the purchase of hardware for themselves.

Company has access to Pool of Resources

- All hardware is shared by the entire company
- By Sharing resources, all business units benefit by having access to more than they previously had

New Services

- The pooling of resources makes it possible for IT to provide new services to the business
- IT will start working more closely with the business

Infrastructure Management and Cloud

Questions?