



UML IOT Special Topics Course

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Agenda

- Introductions
- Class Outline
- Class Lecture Plan/Quest Lecturers
- My commitment
- Student Expectations/Commitments
- Grading
- Quick Red Hat Overview
- Questions

Who Am I

Jeff Brown

Related Information

- UML Graduate from the first Computer Science Class (Let's just say, "Long Ago")
- Long Career at EMC leading Storage Architecture and Advanced development
- 3 years into another, hopefully long career, at Redhat
- I've hired scores of interns over the years from UML
- I taught an IOT course 2 years ago for 15 students
- Last spring we ran the course again
- I'm Back!!

Unrelated to Course

- Avid skier
- Restore old cars
- Love to travel for work and do very frequently
- Married with two kids in college (unfortunately they didn't attend UML)
- Bad with names, so be patient

Student Introductions

Class Outline

- Class exploring the topics surrounding IOT
 - Topics selected by me, by you, and by other invited speakers
- One day a week on Wednesday 2:00 - 5:00
- Class has lecture material and hands on lab experience
- Every student or group of students is responsible for a project
 - Individual or in a group is a decision for the class
- Every class will be structured as 50% lecture and 50% lab
- Daniel Pivonka will be leading the lab segment of the class
- A project presentation will be held at the end of the semester
- A prize will be given to the best project and runner up

Goals: Learn and have fun doing it

Lecture Schedule and Presenters

Currently Planned or Scheduled

Class Introduction

Jeff Brown

Open Sources and IOT

Ric Wheeler

IOT Market and Drivers

Jeff Brown

IOT in Cranberry and Citrus Businesses

Brett Niver

Overview of IOT device SW *

Jeff Brown

Network Issues in IOT space

Rashid Khan

USB attacks in IOT devices

Federico Lucifredi

Ux Design Concerns in IOT World

Ju Lim

*This a generic discussion surrounding or lab/project framework

Lecture Schedule and Presenters

TBD

IOT Cloud Services/Providers

Jeff Brown

Red Hat IOT Architect View

Peter Robinson

Student IOT Device Review

Students in Class

Issues Surrounding Data Collection/Privacy

Jeff Brown

Prospective from an Angel Investor

Doug Wood

Class Lecture Selection

TBD

TBD

TBD

TBD

TBD

My Commitment

- To be engaged and make this class meaningful
- I'll listen and take suggestions from the students
- I'm available for questions and issues as they arise
 - Cell 508-614-5187 email: jefbrown@redhat.com
- You will learn something in this class
- We will have fun
- When I travel I will have lecture coverage for the class

I believe the mixed lecture format will give a much broader viewpoint and perspective from many great engineers.

Your Commitment

- To be engaged, participate, and be respectful of others
- Give feedback and suggestions if you want more from the class
- Attend class, as this plays a role in your grading
- Give your perspectives and experiences as that counts towards grading as well
- Keep up to date with the lab assignments as the end of semesters arrives quickly
- Speak up when you don't understand and need clarification
- Let us know if and when your going to miss class

Grading

Grading Components

- Class Attendance and participation 25%
 - 1 absence without penalty, 5% reduction every additional
- Labs (Base labs and Project Abstract) 25%
- Class Presentation Assignment 5%
- Project 35%
- Project Presentation 10%

Warning: You won't receive a grade if you fail to return the equipment

Red Hat Overview

Sponsor of our time and budget

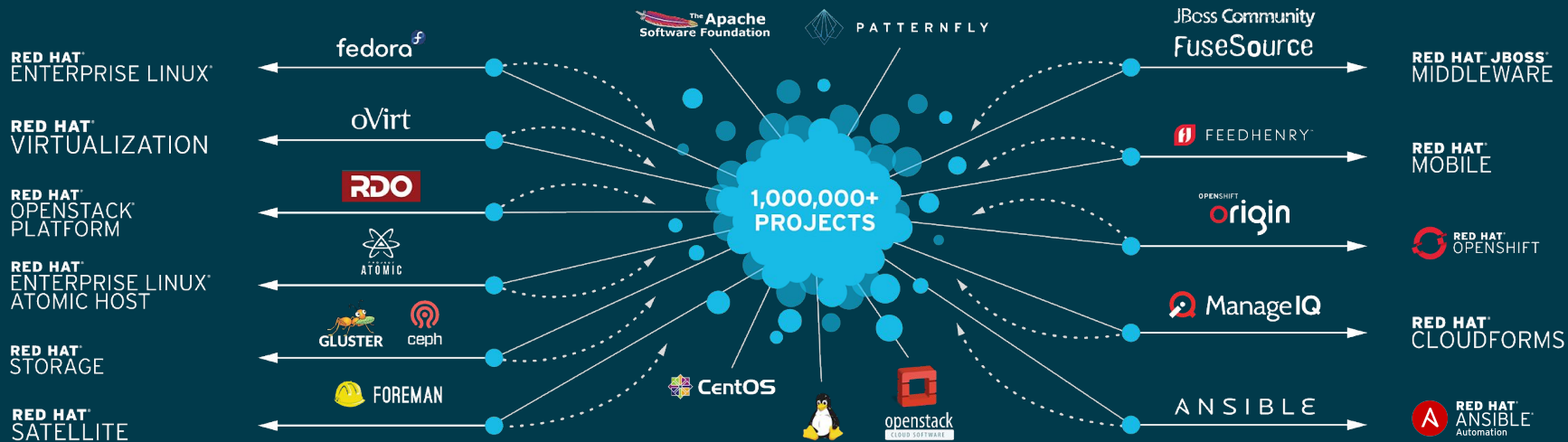
OUR BUSINESS

**Red Hat is an enterprise-class software company
with an open source development model.**

OUR WHY

Because open unlocks the world's potential.

FROM COMMUNITY TO ENTERPRISE



THE 3 PILLARS OF OUR BUSINESS

OPEN HYBRID CLOUD



HYBRID CLOUD INFRASTRUCTURE

Infrastructure software
across the 4 footprints, with
RHEL at the very core.



CLOUD-NATIVE APP PLATFORMS

Software to rapidly &
efficiently develop & deploy
apps across hybrid cloud.



MANAGEMENT & AUTOMATION

Software can simplify
management & automation of
hybrid cloud environments.

OUR TOP HYBRID CLOUD COMPETITORS

TRADITIONAL I.T. VENDORS



priority competitor



CLOUD PROVIDERS



priority competitor

Microsoft Azure

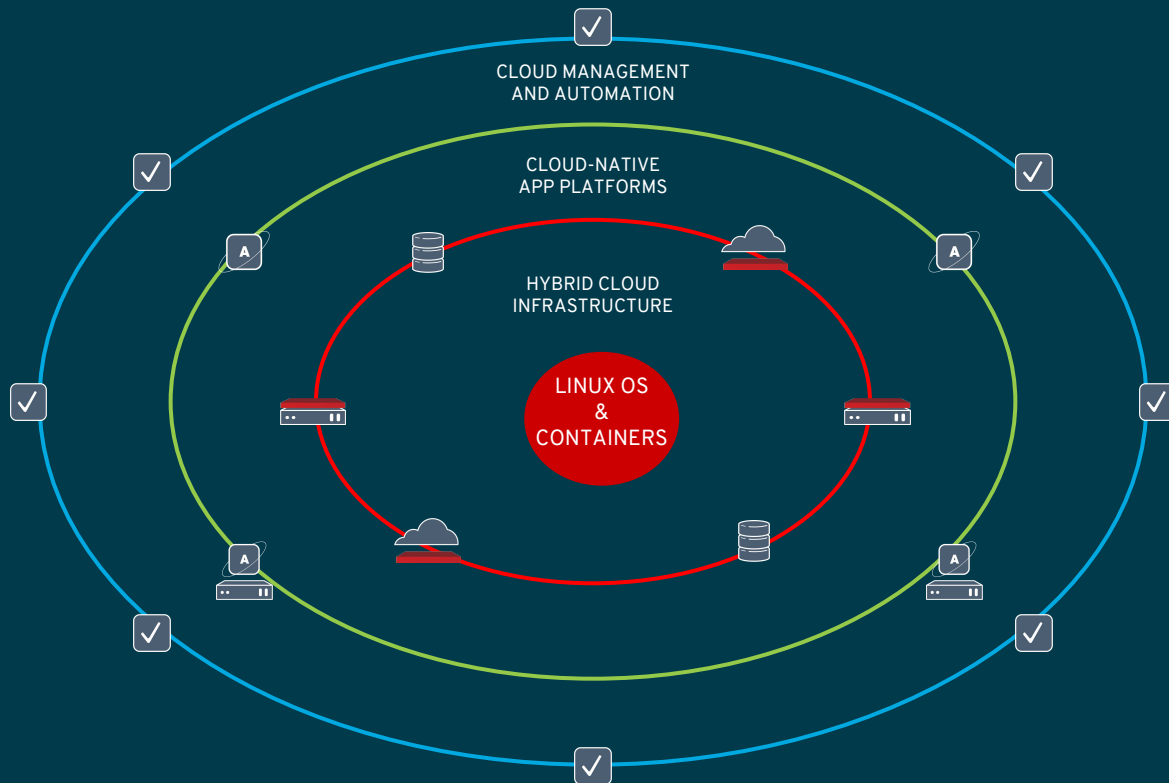


TECHNOLOGY STARTUPS

Across the portfolio, there are startups or single-category vendors competing against our products and taking mindshare around key technology areas. They move fast and are biased toward open source.

COMMUNITY SOFTWARE & DIY

THE PILLARS ARE INTERCONNECTED WITH RHEL AT THE CORE



THE PORTFOLIO MUST WORK TOGETHER

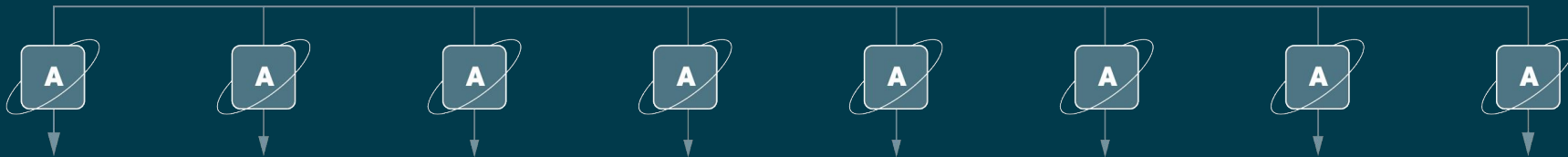
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ENTERPRISE
APPLICATION PLATFORM

RED HAT JBOSS
DATA GRID

RED HAT JBOSS
BPM SUITE

RED HAT
DECISION
MANAGER

RED HAT
OPENSIFT
Container Platform



RED HAT
ENTERPRISE LINUX



RED HAT
VIRTUALIZATION



RED HAT
OPENSTACK
PLATFORM



Google



amazon.com
AWS SERVICES



Microsoft Azure



OTHER
PUBLIC CLOUDS

RED HAT
ENTERPRISE LINUX

RED HAT
GLUSTER STORAGE

RED HAT
CEPH STORAGE



HELP OUR CUSTOMERS ACHIEVE THIS...

ANY APPLICATION.
ANY ENVIRONMENT.
NO LOCK-IN.



THANK YOU