Amazon EC2 & Eclipse

PACIFIC
HI-TECH

Using Amazon EC2 tools in Eclipse

Greg Hester
Pacific Hi-Tech, Inc.
greg.hester@pacifichitech.com
808-497-7323

Pacific Hi-Tech, Inc. © 2008

Agenda

- What is AWS & EC2?
- What is an AMI?
  - IBM provides EC2 AMIs
- Amazon EC2 Console
  - AMI (Amazon Machine Image)
- Eclipse with EC2 Plugin
  - AWS Toolkit
  - Eclipse.org g-eclipse

Pacific Hi-Tech, Inc. © 2008

PACIFIC HI-TECH

What is AWS & EC2?

- Using Amazon Web Services, an e-commerce web site can weather unforeseen demand with ease; a pharmaceutical company can “rent” computing power to execute large-scale simulations; a media company can serve unlimited videos, music, and more; and an enterprise can deploy bandwidth-consuming services and training to its mobile workforce.
- Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides resizable compute capacity in the cloud. It is designed to make web-scale computing easier for developers.

Pacific Hi-Tech, Inc. © 2008

PACIFIC HI-TECH

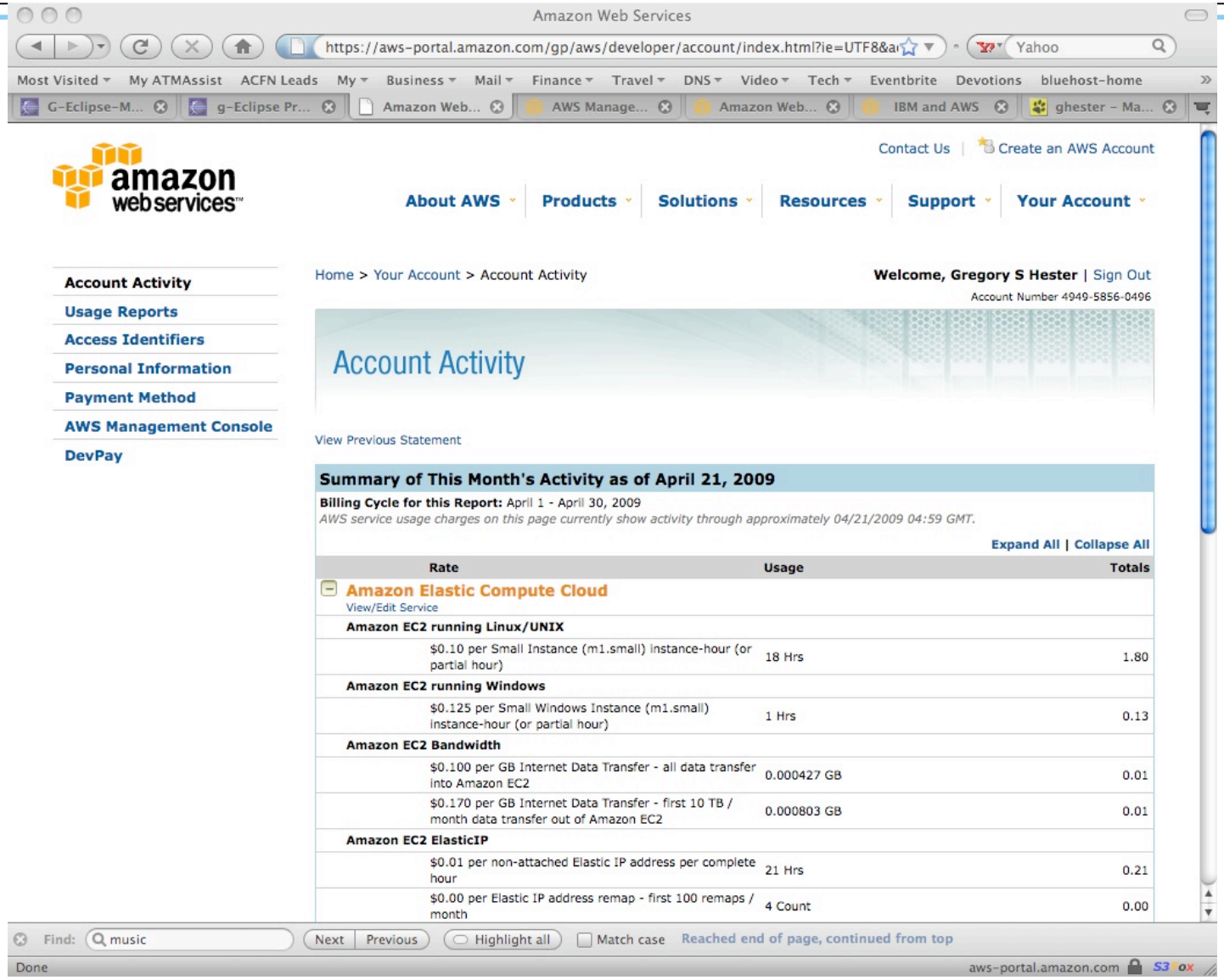
What is an AMI?

- An Amazon Machine Image (AMI) is a copy of a server instance that you can use to launch identical copies of the instance at any time. For example, an AMI might contain Linux, Apache, and your web site content; it might contain Linux, Hadoop, and a custom application; or it might contain Windows, Internet Information Server (IIS), SQL, and your web store data.
- To use EC2 first sign up at:
  - http://aws.amazon.com/ec2
- IBM provides AMI's with IBM Tools installed (Dev AMI's are Free)
  - http://aws.amazon.com/solutions/featured-partners/ibm/

Pacific Hi-Tech, Inc. © 2008

PACIFIC HI-TECH

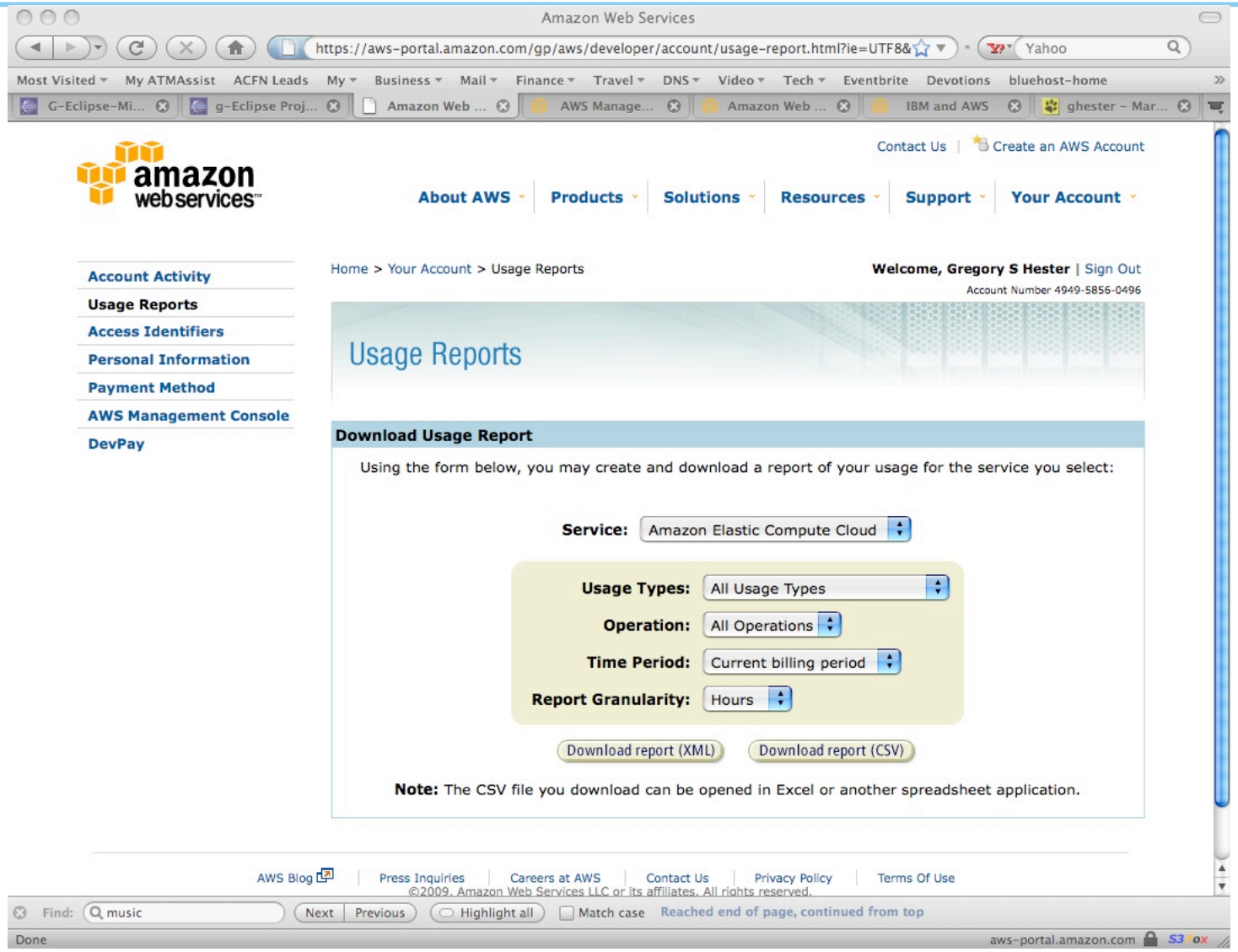
EC2 Account Activity



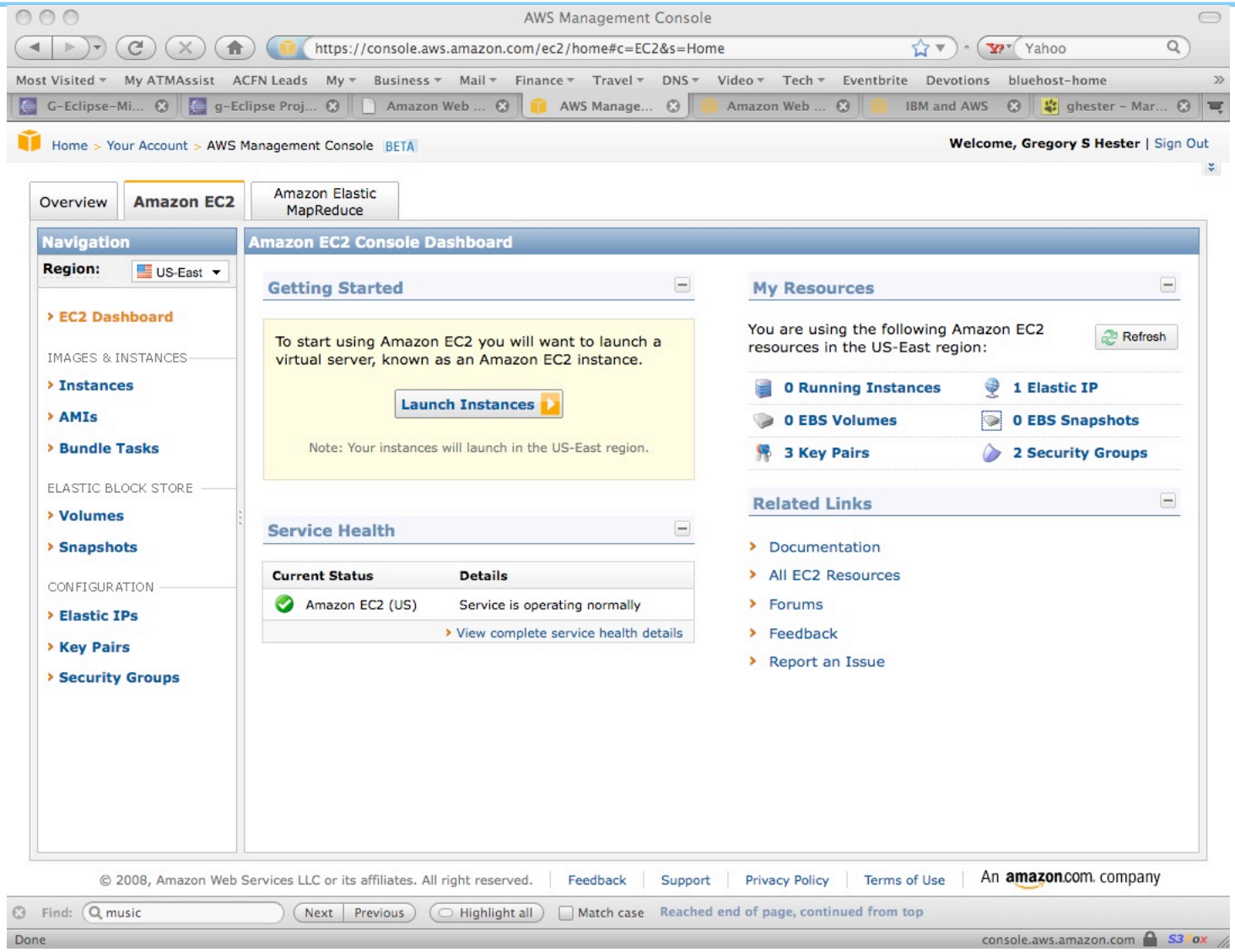
Pacific Hi-Tech, Inc. © 2008

PACIFIC HI-TECH

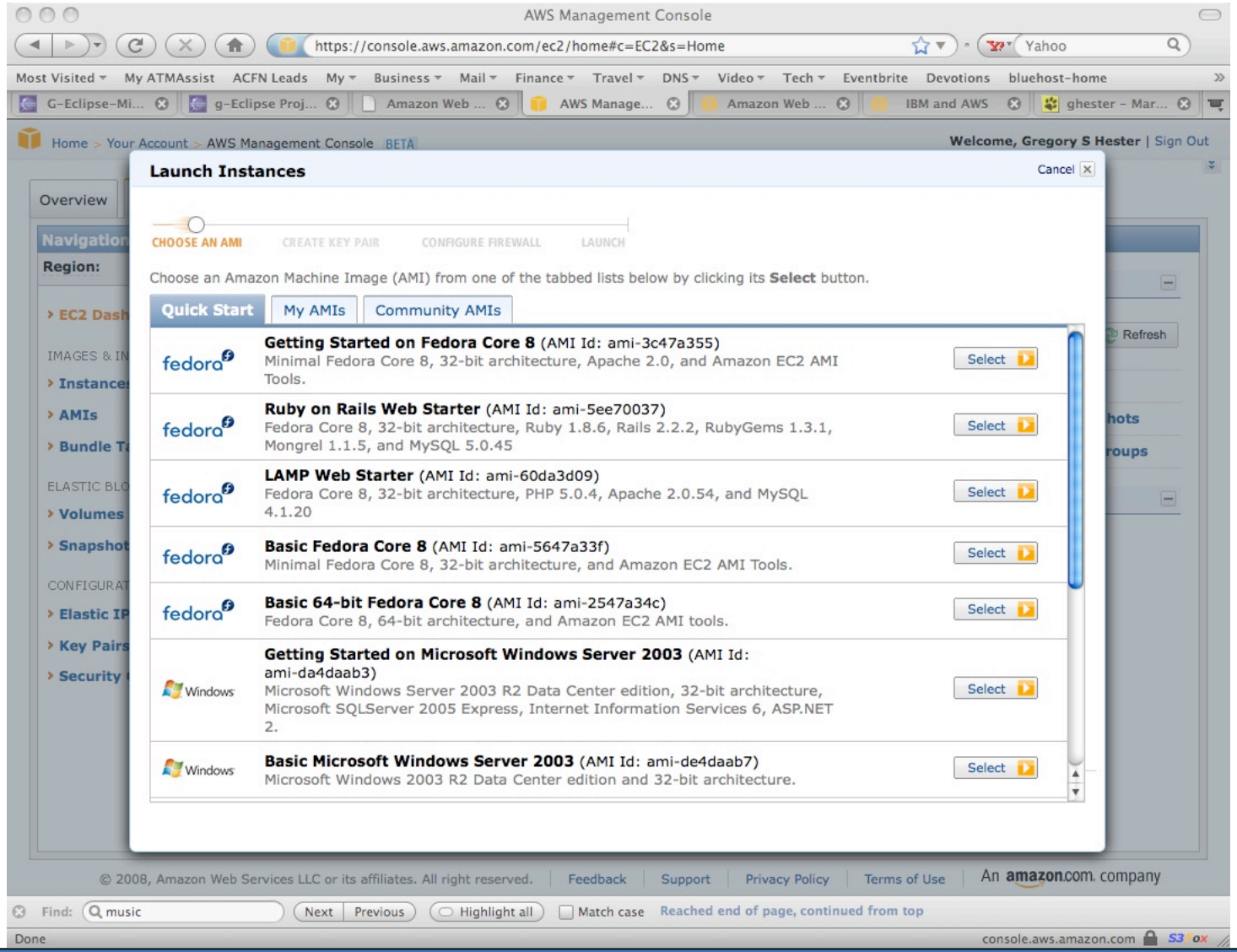
EC2 Usage Report



EC2 Dashboard

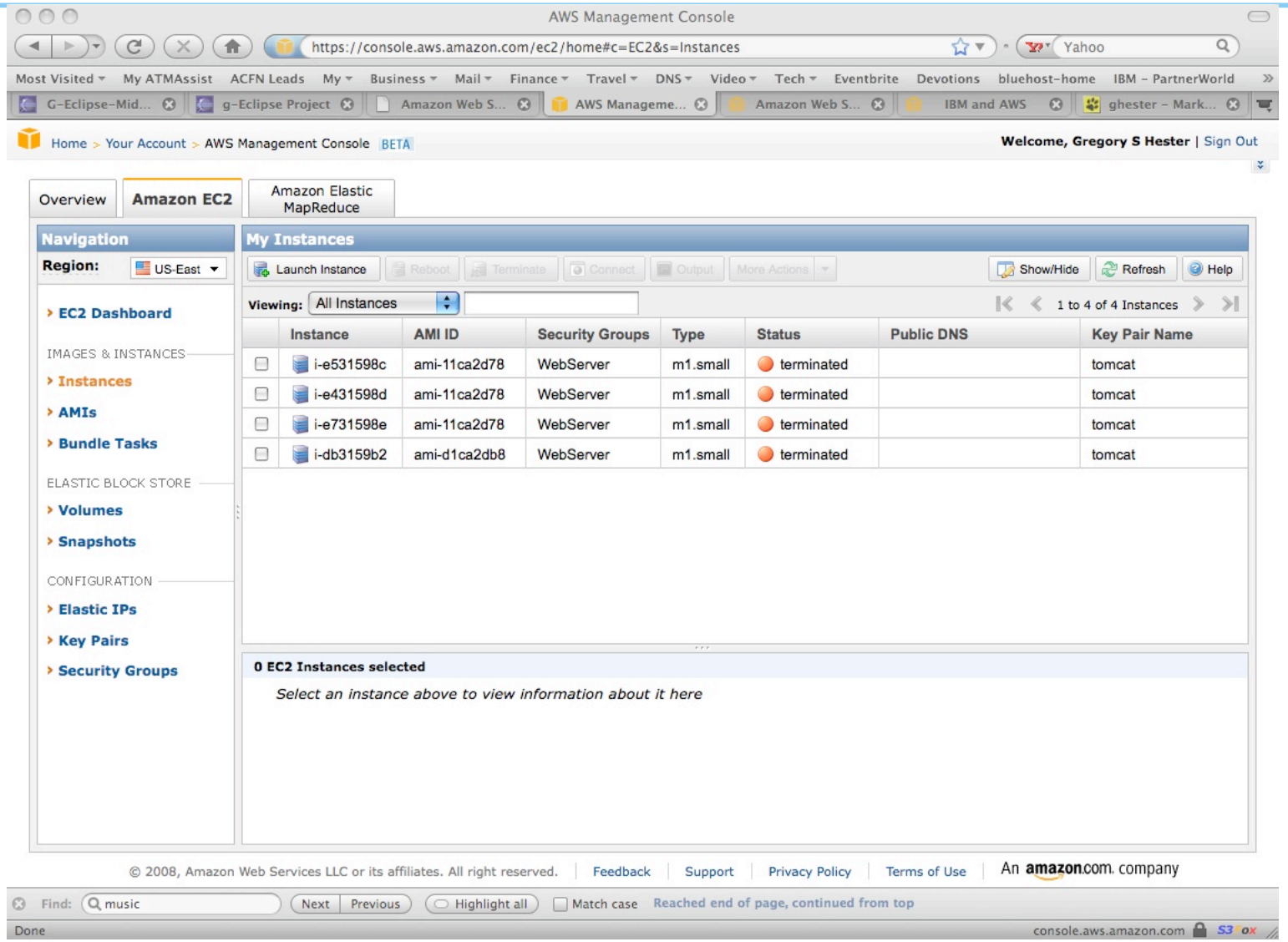


EC2 Instance - Launch



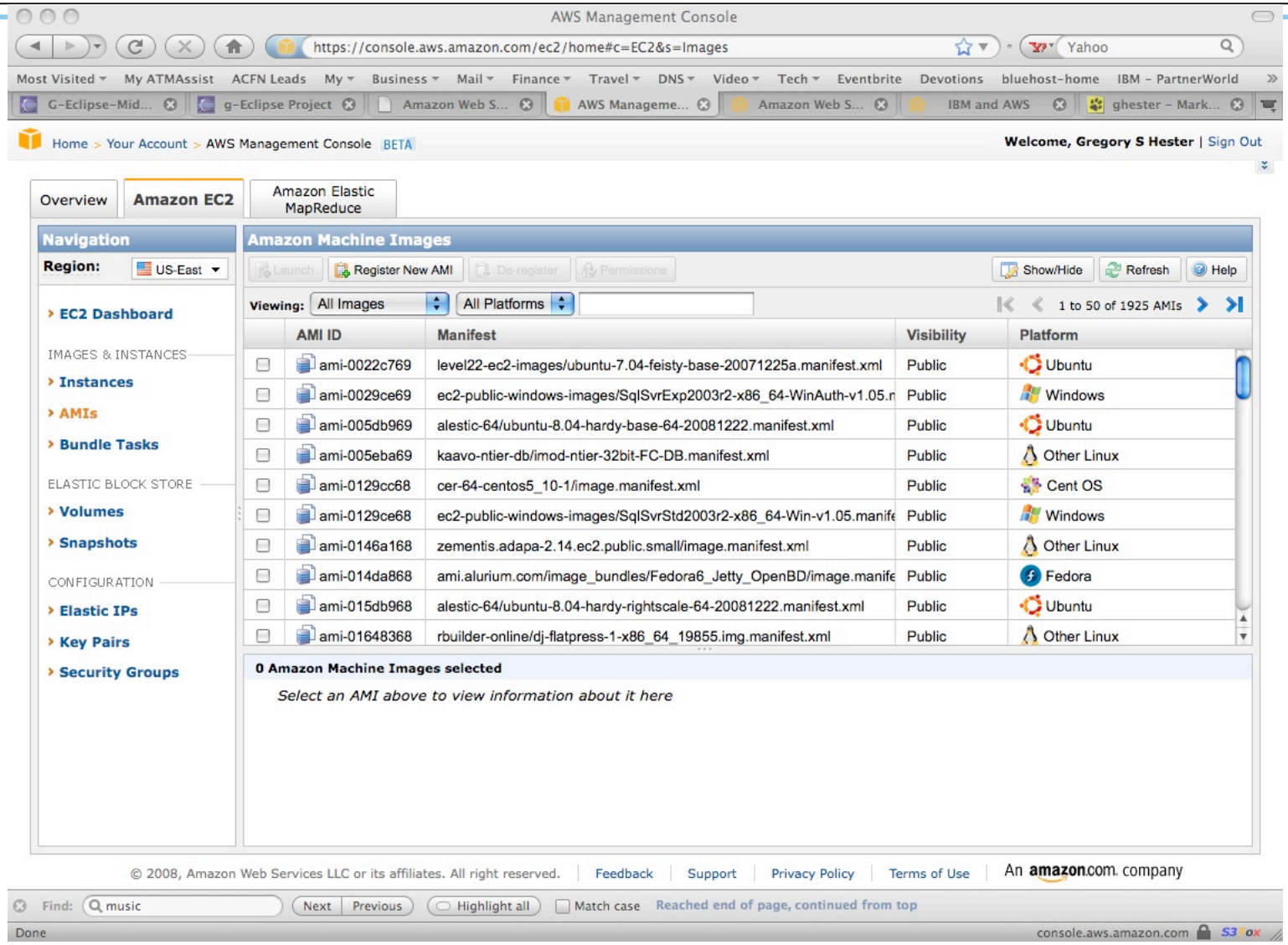
PACIFIC HI-TECH

EC2 Instances

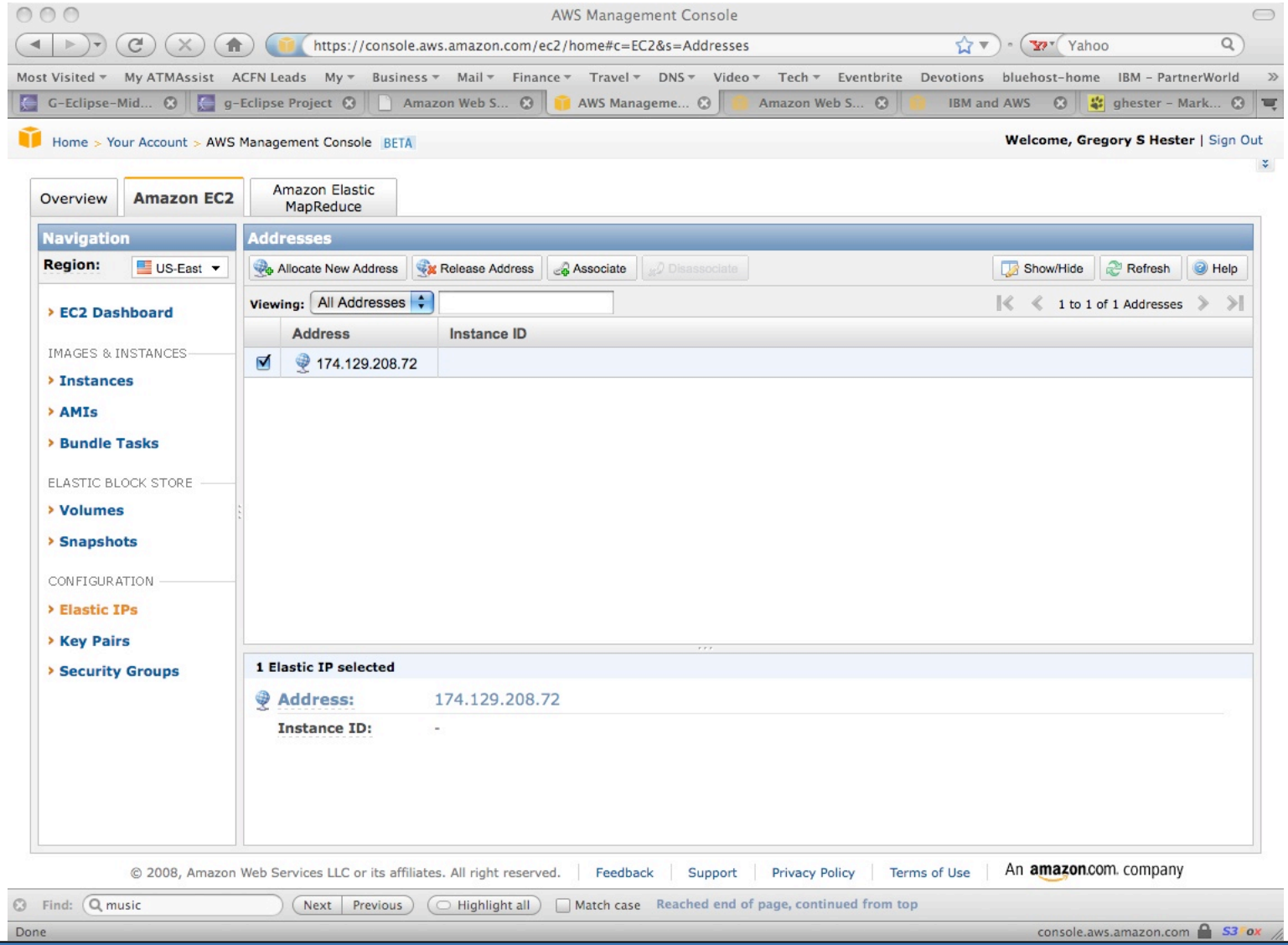


PACIFIC HI-TECH

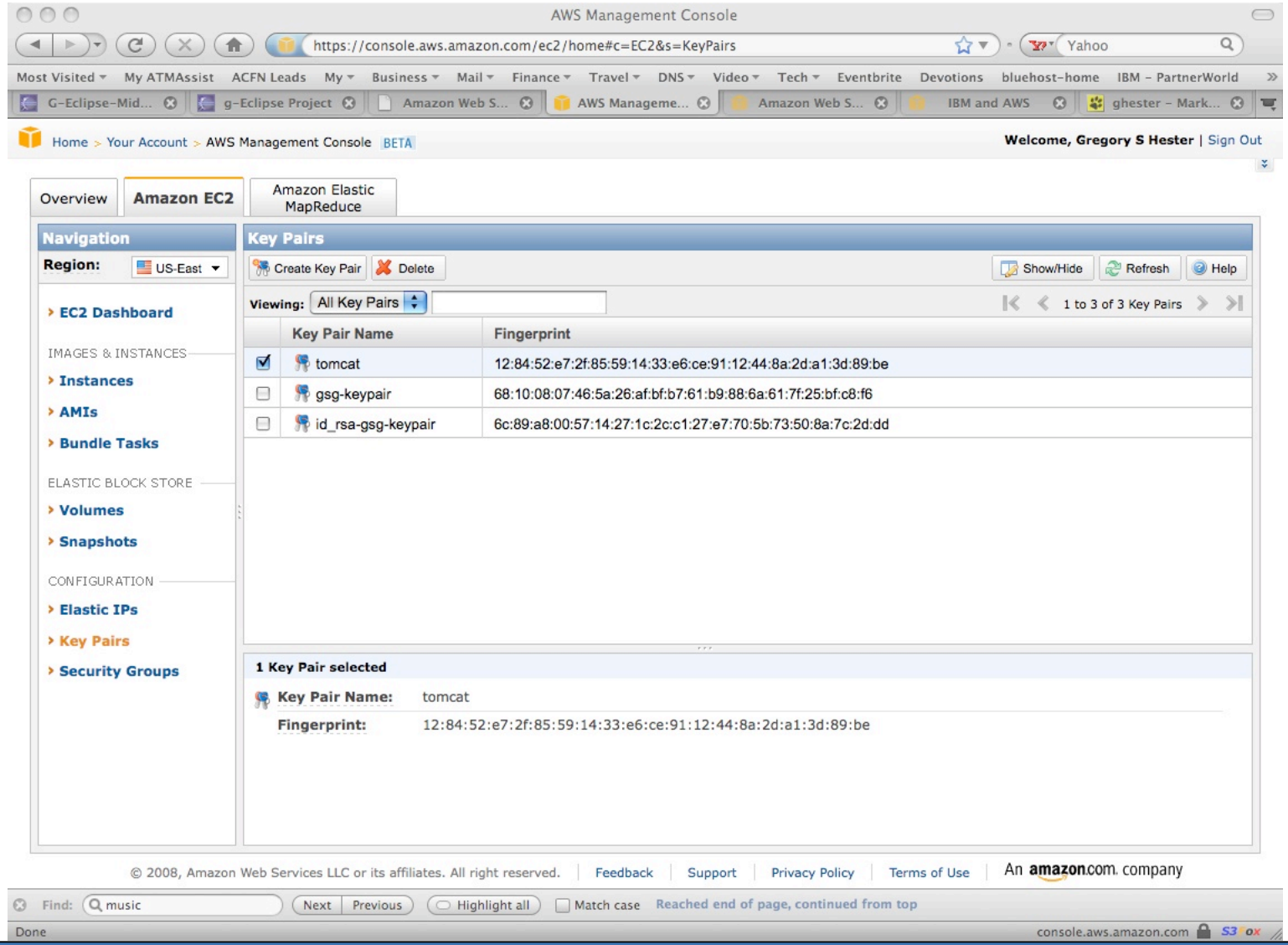
EC2 AMIs



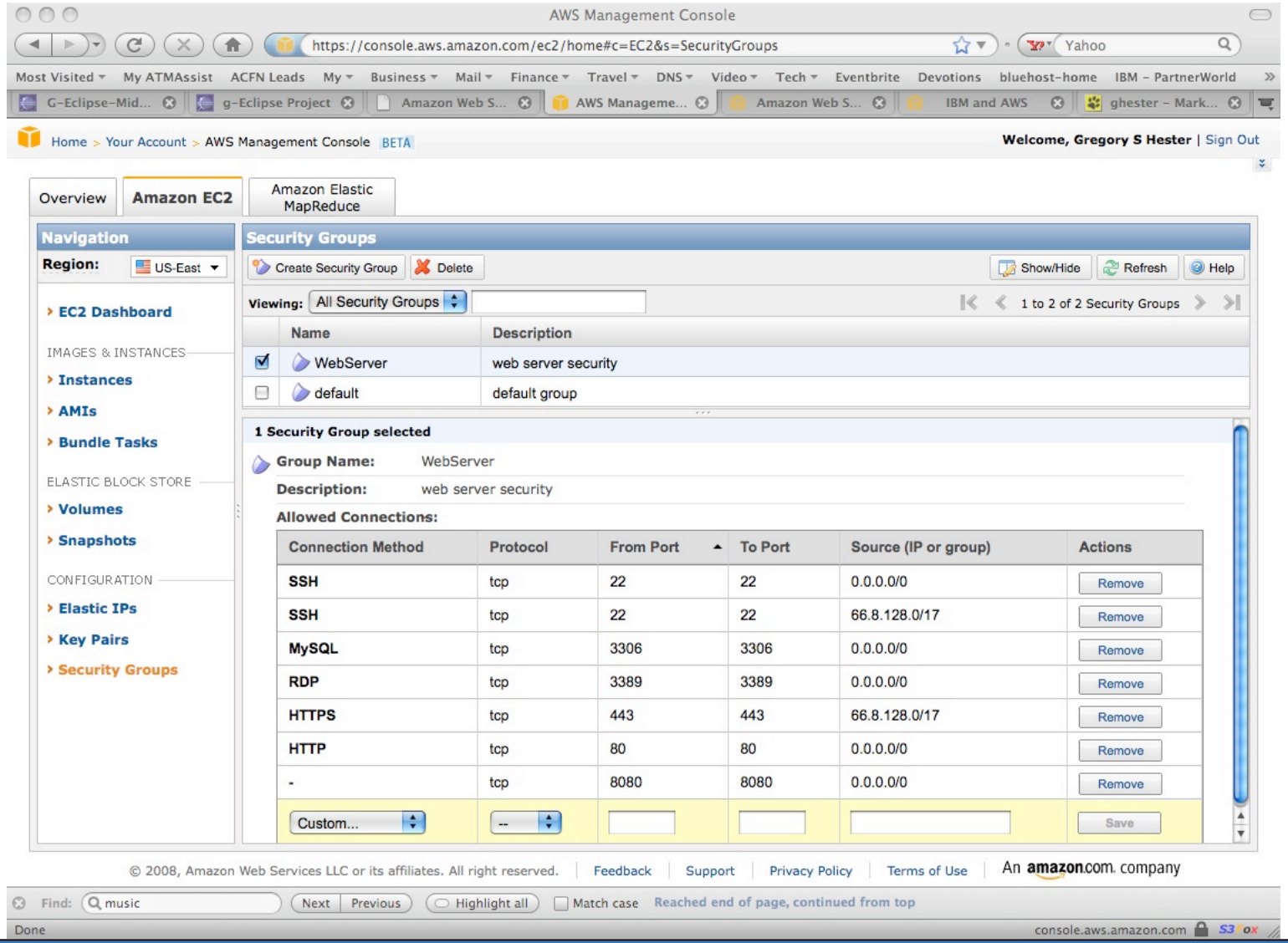
EC2 Elastic IPs



EC2 Key Pairs



EC2 Security Groups



Eclipse Support for EC2

From Amazon

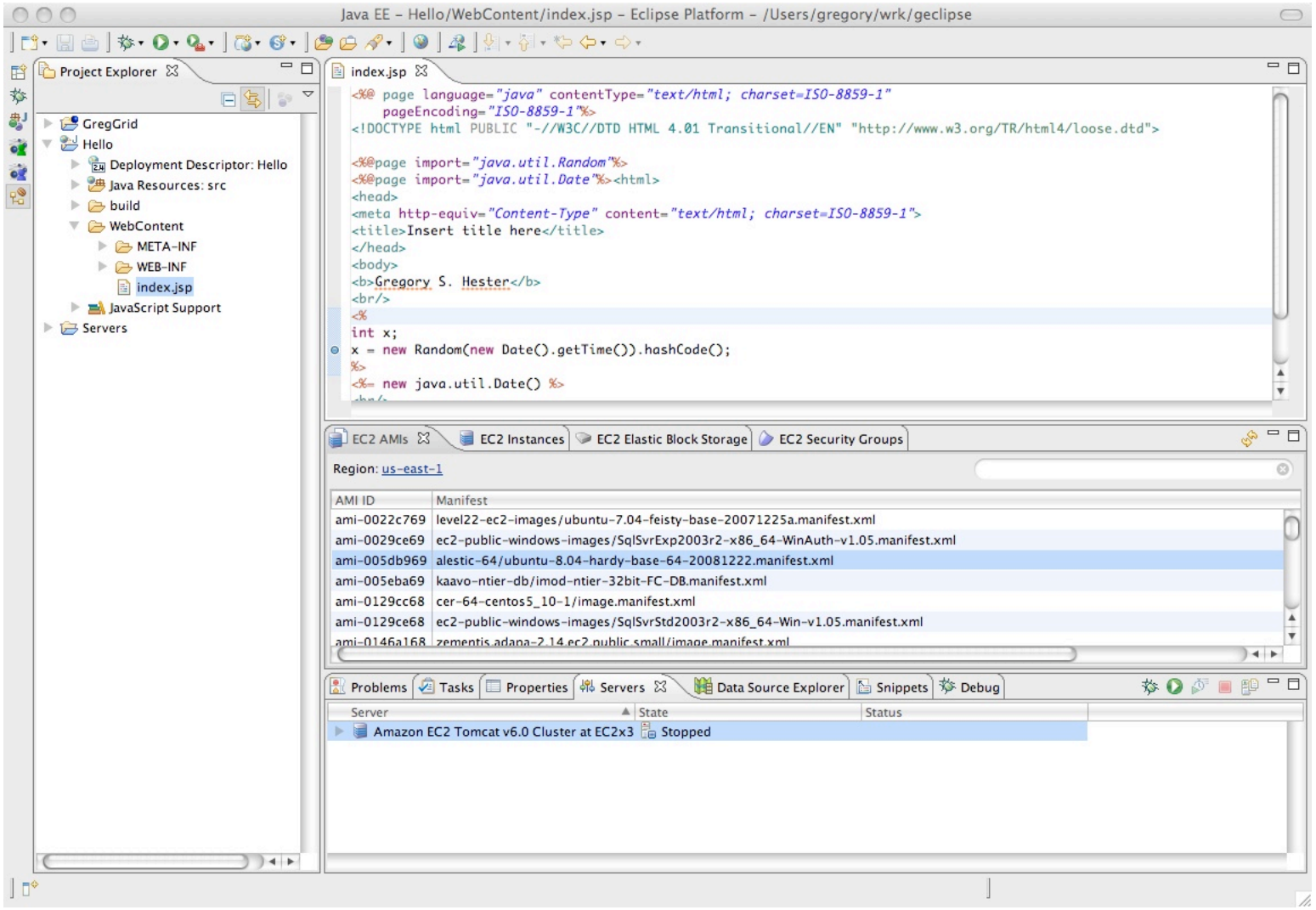
- AWS Toolkit for Eclipse
  - http://aws.amazon.com/eclipse/
- Developing Java Web Applications with Apache Tomcat and AWS
  - http://developer.amazonwebservices.com/connect/entry.jspa?externalID=2241

From Eclipse

- g-Eclipse Project (Tools for Grid & Cloud Computing)
  - http://www.eclipse.org/geclipse/
- g-Eclipse and AWS
  - http://www.eclipse.org/geclipse/gettingstarted.php

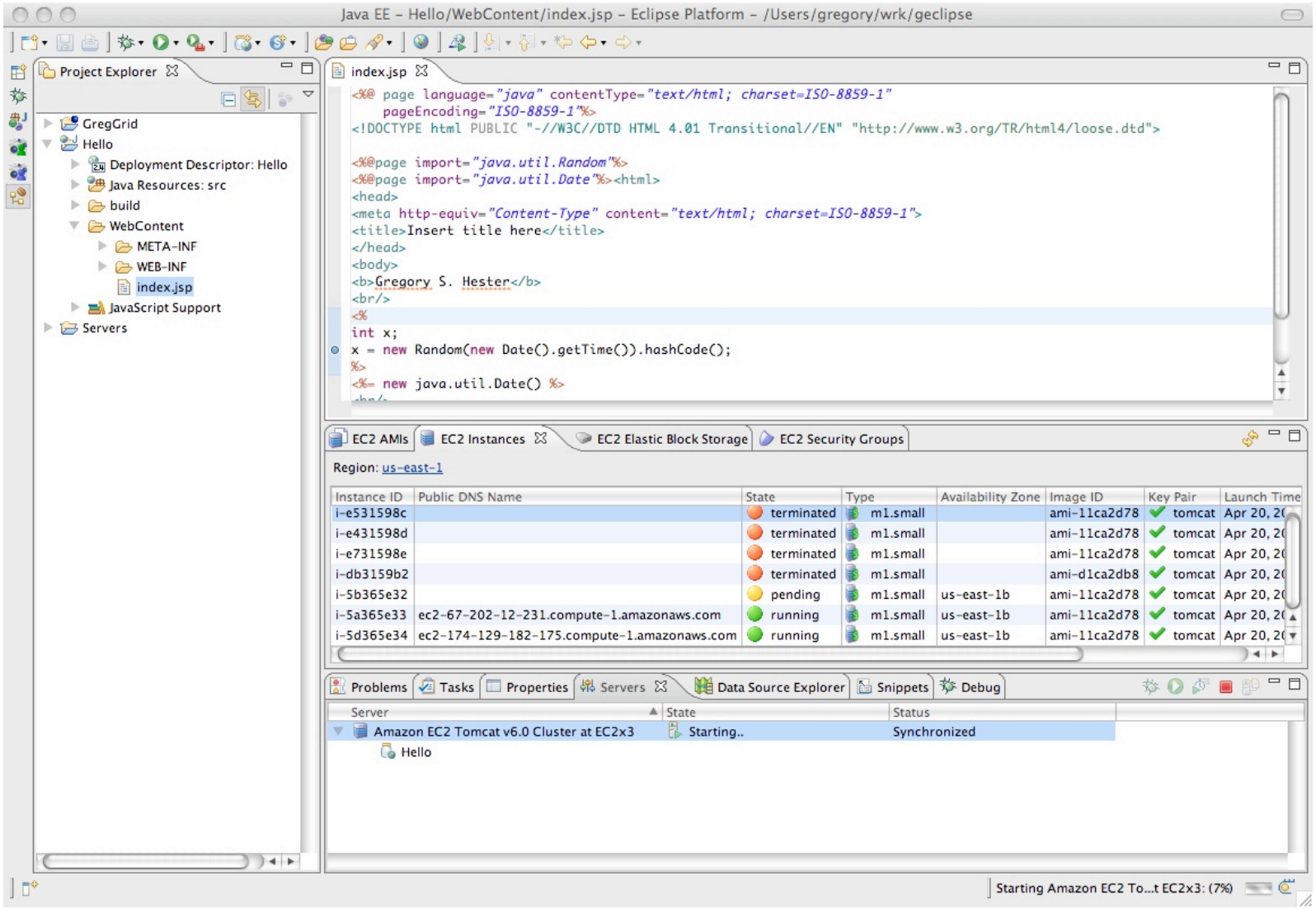
Pacific Hi-Tech, Inc. © 2008

Eclipse EC2 AMIs



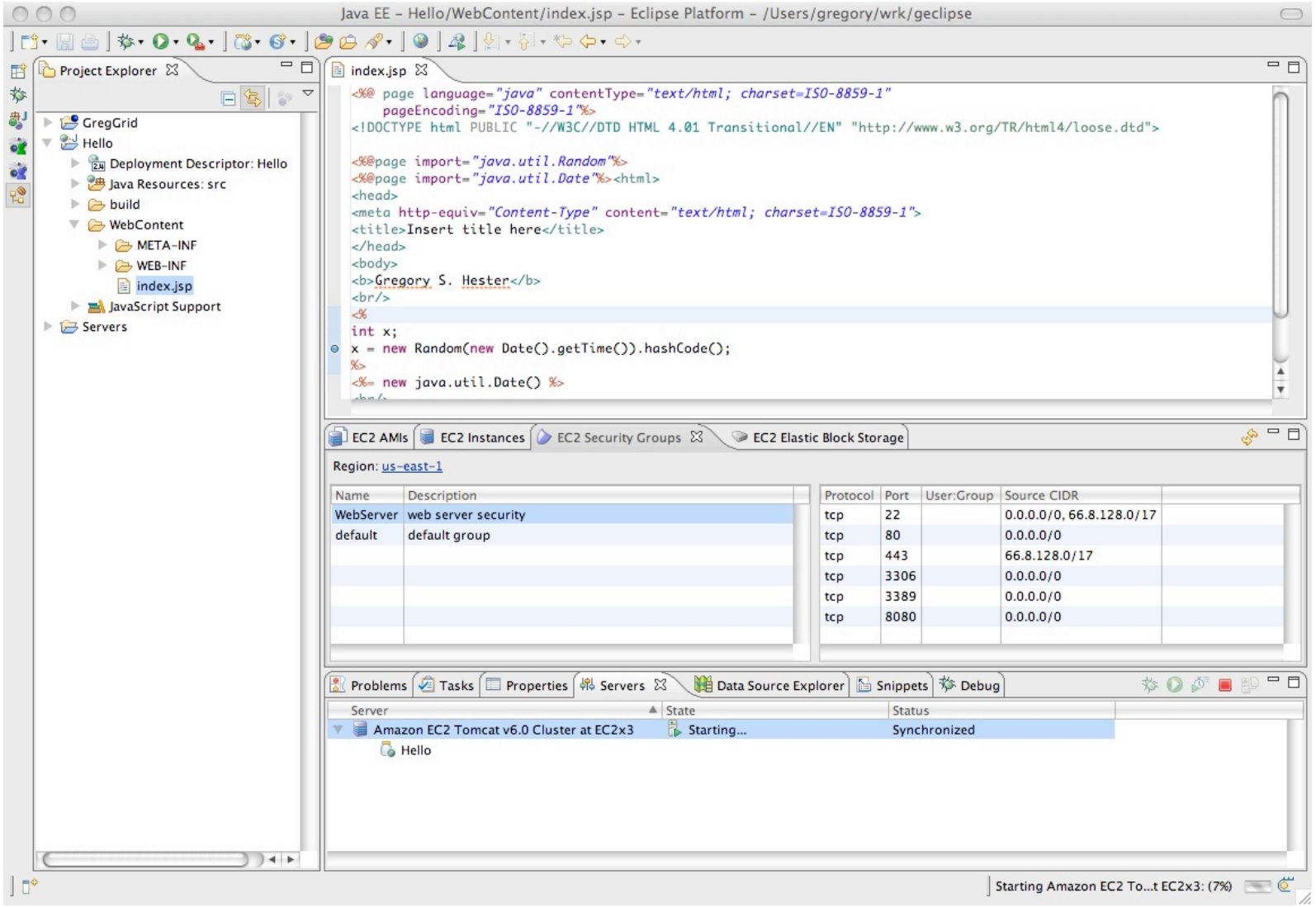
Pacific Hi-Tech, Inc. © 2008

Eclipse EC2 Instances



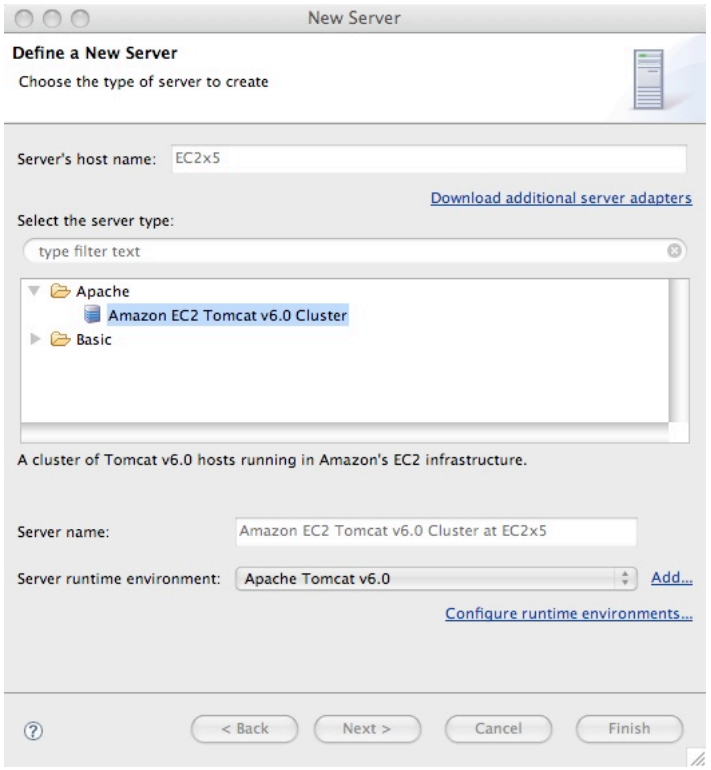
Pacific Hi-Tech, Inc. © 2008

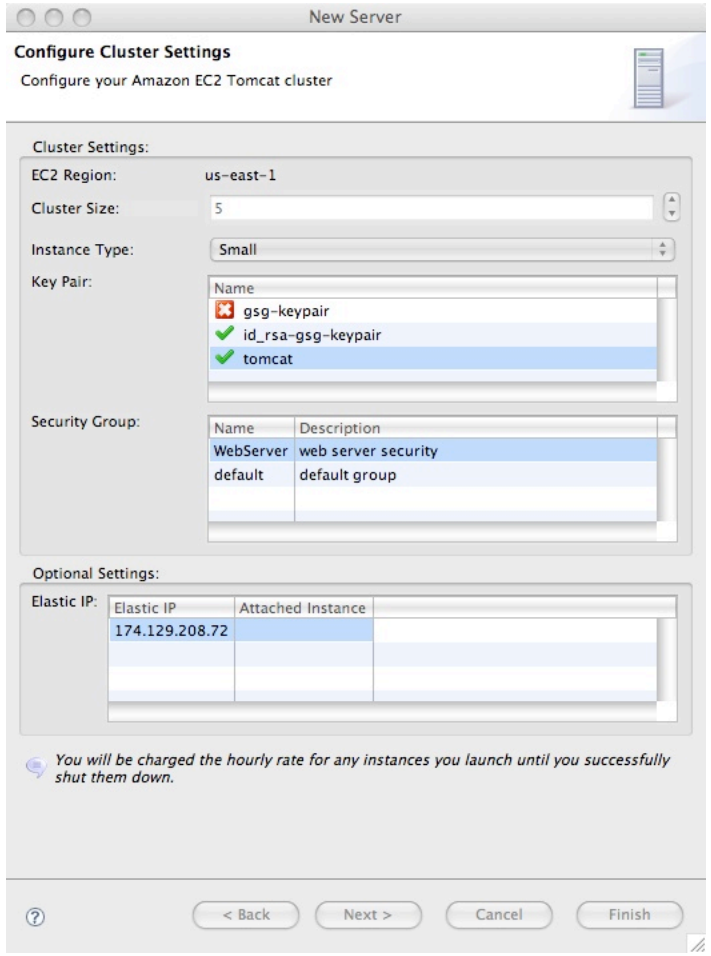
Eclipse EC2 Security Groups



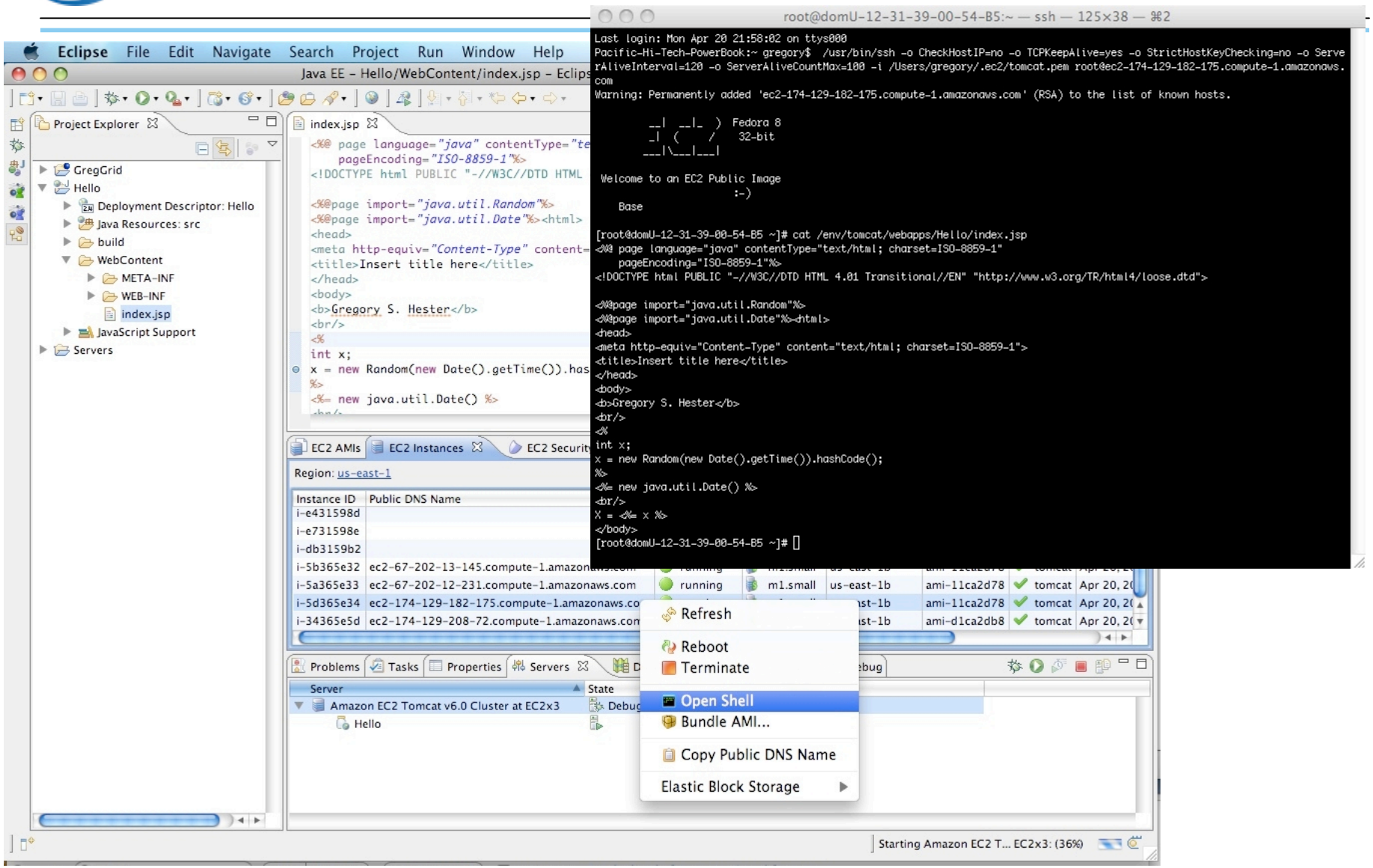
Pacific Hi-Tech, Inc. © 2008

Eclipse EC2 Tomcat Server





Eclipse Launch Console



PACIFIC HI-TECH

Q&A

www.pacifichitech.com

Pacific Hi-Tech, Inc. © 2008