

Welcome



Creating New Value from Web API's

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BM Senior Certified IT Specialist
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WebSphere Product Marketing
Manager
IBM.

BIO:

- Expertise with SOA Appliances
- Experience in IT architecture and enterprise integration

BIO:

- Ensure DataPower appliances meet customer needs
- Expertise on DataPower for Edge of Enterprise

Overview

SERIES FOCUS

SOA-based building blocks for a reliable security and integration gateway for your enterprise, for the edge -- and beyond.

- **Quickly and cost-effectively** secure and govern workloads in a connected world
- Extend securely and optimize your enterprise services & data
- Centrally secure, rapidly connect applications across platforms, devices and channels

TODAY'S AGENDA

Creating New Value from Web API's

- How Web APIs are 'game changers' for IT, dev communities & business models
- Ways to prepare your company to enter the API Economy
- Technical Drill Down - IBM Cast Iron Live Web API Services (features, demo)

View Other IBM 'Edge of Enterprise' Series Webcasts (On Demand)

- **Security and Integration in a Wider-Connected World**
- **Secure, Optimize and Govern B2B Services on DataPower**
- **A 2013 Competitive Review of SOA Appliances**

For Best Viewing

- **All speaker slides available (Breakout Sessions)**
Download Slides link under the Breakout Session viewing area
- **Added list of valuable downloads**
Whitepapers, Datasheets, etc.
- **To ask speaker questions**
Type into the question box under the viewing area

Creating New Value from Web API's

Securely and Rapidly Create, Socialize, and Manage Business API's to engage with a Developer Ecosystem

Hasan Jilani

WebSphere Product Marketing Manager



Agenda

- Recent Shifts In The Market
- The Business of API's
- How to Enter The API Economy – Overview of Cast Iron Live Web API Services
- Demo – How to Build a Simple API Assembly



The Market Pressure

- The **explosion of devices** and channels
 - How do you support delivery of your services and products on all of these devices?
- **Applications** are smaller, more focused, and **come and go very fast**
 - How do you keep up with the rate of change?
- **Competitive pressure** forcing the need for faster innovation
 - How do you foster innovation to beat out competition?
- Partnerships need to be **established quicker** and **connected quicker**
 - How do you create new partnership fast which our outside of your normal interactions?
- **Brand loyalty** is always under attack
 - How do you get and maintain brand loyalty?



The Web Beyond the Browser



Businesses
are Evolving



stores



(800) ###s



web sites



Web APIs are the
new, fast-growing
business channel



“\$7bn worth of items on eBay through APIs”

Mark Carges (eBay CTO)



“The API which has easily **10 times more traffic** then the website,
has been really very important to us.”

Biz Stone (Co-founder, Twitter)



“The adoption of Amazon’s Web services is **currently driving more network activity** then everything Amazon does through their
traditional web sites.”

Jeff Bar (Amazon evangelist) / Dion Hinchcliffe (Journalist)

Web 1994 was the “get me a domain and a page” era.

Web 2000 was the “make my page(s) interactive and put people on it” era.

Web 2010 is the “get rid of pages and glue APIs and people together” era.”

Robert Scoble (Author of tech blog Scobleizer)

Not having an API today is like not having a Web Site in the ‘90s



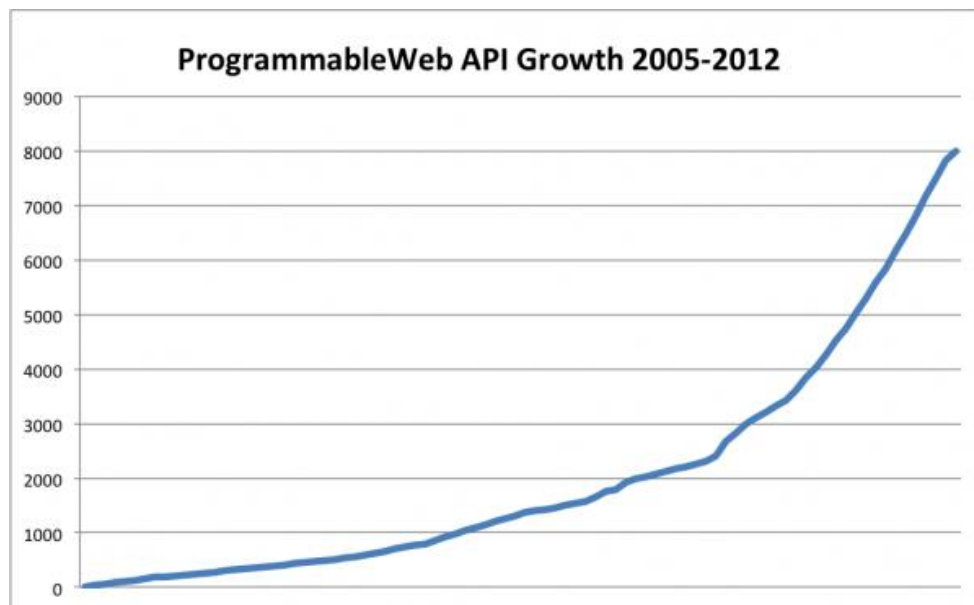
The Pulse of APIs in the Market



November 26th, 2012 – ‘Enterprises rarely move as quickly as the rest of the web. Many, including us at ProgrammableWeb, have been saying for some time that big companies will embrace the open API movement. It appears this may be happening in earnest now, as our directory hits the milestone of 8,000 APIs.’

<http://www.programmableweb.com/>

Company	APIs	Most Popular
Twitter	3 + 101	Twitter API
Google	96	Google Maps API
Yahoo	51	Flickr API
Xignite	43	Xignite Realtime Stock Quotes API
Microsoft	33	Microsoft Bing Maps
AOL	30	MapQuest API
Amazon	23	Amazon Product Advertising API
Orange	19	Orange Location
eBay	18	eBay API
Ericsson	16	Ericsson Web Maps
New York Times	14	New York Times Article Search
Yandex	10	Yandex Search API
AT&T	9	US Yellow Pages API
Salesforce.com	8	Salesforce.com CRM API
USA Today	8	USA Today News API
Facebook	8	Facebook API
Rackspace	6	RackSpace Cloud Servers API
Telenor	6	Telenor Payment
InfoChimps	5	InfoChimps Twitter
Deutsche Telekom	5	Deutsche Telekom Send SMS API
SingTel	5	SingTel Messaging API
T-Mobile	5	Developer Garden API
Telefonica	5	BlueVia Location API
Pearson	3	Longman Dictionary API
Vodafone	3	Vodafone Geolocation
Verizon	2	Verizon NavBuilder LocationKit



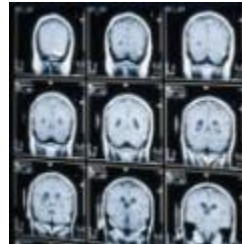
Web APIs are Emerging Across All Industries



**Energy and
Utilities**



Government



Healthcare



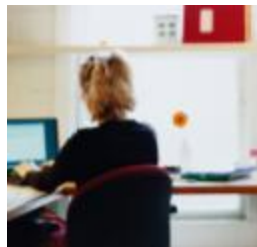
Transportation



Retail



Banking



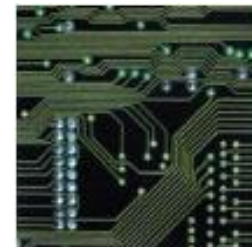
Insurance



Teleco



**Chemical and
Petroleum**



Electronics



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The Basics Of an Web API

What is an Web API?

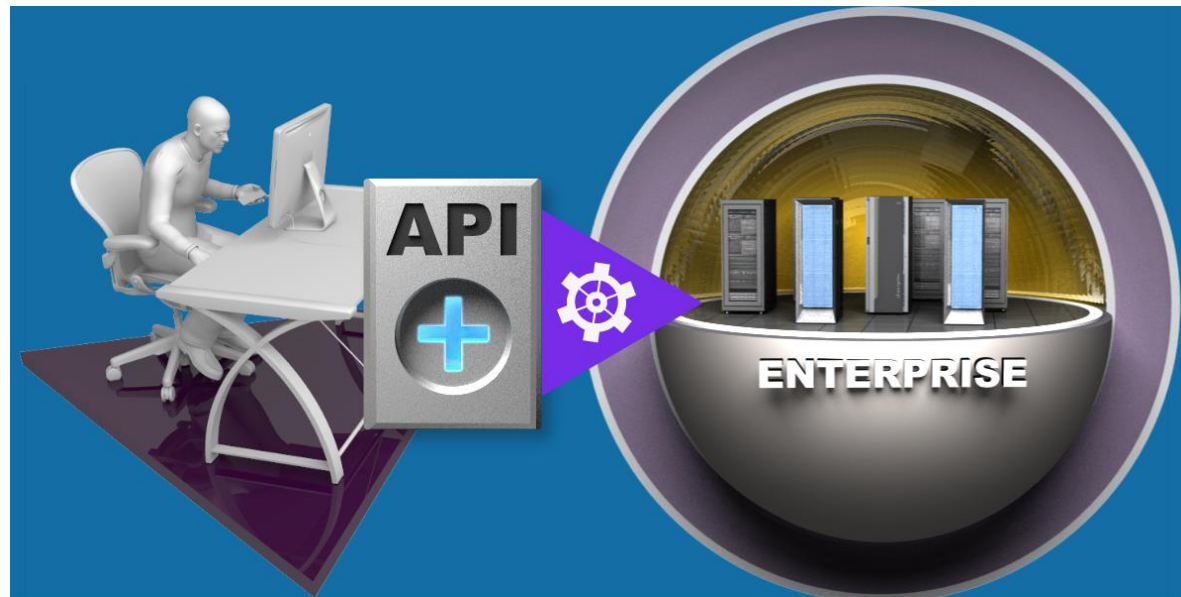
- An web API is a **public persona** for an enterprise; exposing defined assets, data or services for public consumption
- An web API is **simple** for app developers to use, access and understand
- An web API can be easily invoked via a browser, mobile device, etc

What Value Does an Web API Provide?

- Extends an enterprise and opens new markets by allowing external app developers to easily leverage, publicize and/or aggregate a company's assets for broad-based consumption

What “assets, data or services” are exposed via an Web API?:

- Product catalogs
- Phone listings
- Insurance cases
- Order status
- Bank loan rates



Understand Value Chain In an API Economy



- The End Users need to receive value from using the application. What do they gain?



- The Application Developer finds the web API and creates the applications. There needs to be a value for the developer to develop on your web API.



- The Business Owner owns and understands the value of the Business Asset. Decides which assets to make available. Understands the value the web API will return

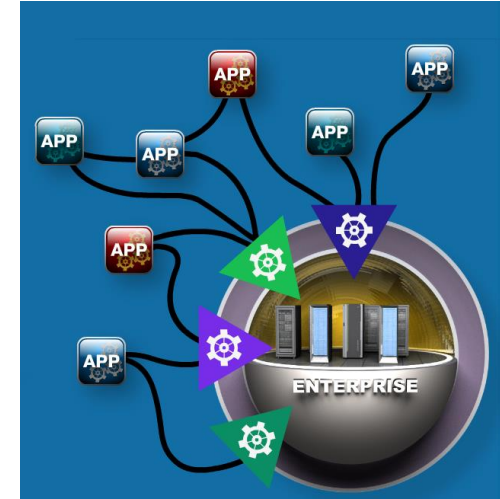


Business/IT Asset



The Economy of API's

- Web APIs become like a Product in their own right and need to be nurtured
- Web APIs will affect your business channel structure and you need to be aware of how
- Web APIs need a business strategy



Strategize and Establish Goals



- Drive Revenue Through New Channels
- Drive Brand Recognition
- Faster Integration with Partners
- Faster Delivery of Mobile Apps
- Increase Customer Satisfaction

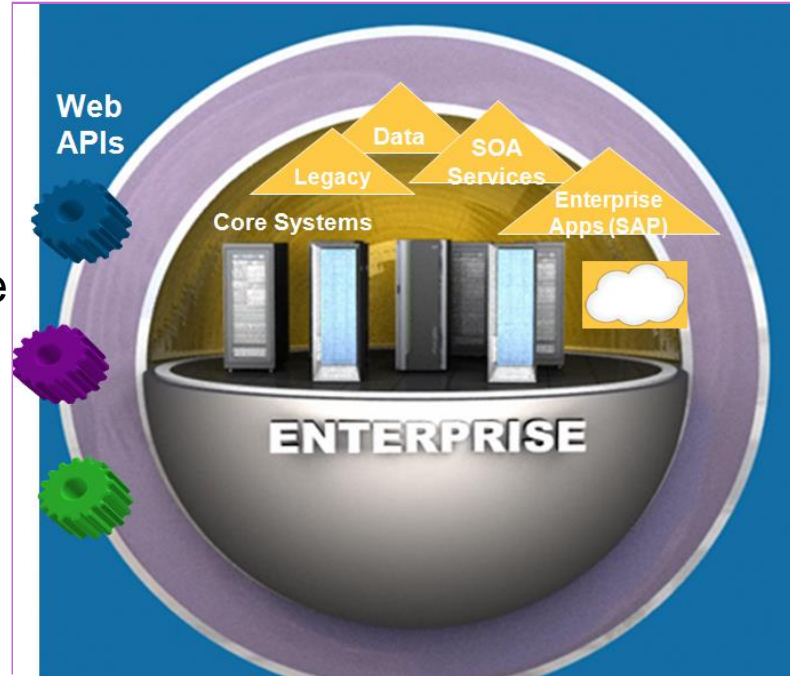


How do You Choose Which Business Assets To Expose?



Will this business asset support the goal or object of your web API Strategy?

Who is going to use the web API?



Why Would the Developer Want to Use this web API

What applications do you envision being created with this web API

- How will the exposition of this asset affect my business



What Business Model Will You Choose



For Free

- Drives Adoptions of APIs
- Typically low valued assets
- Drive brand loyalty
- Enter new channels



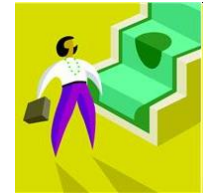
Developer Pays

- Business Asset must be of high value to the Developer
- For example, marketing analytics, news,
- Capabilities such as credit checks



Developer Gets Paid

- Provides incentive for developer to leverage web API
- Ad placements
- Percentage of revenue sold product or services



Tiered

- Offer varying service levels and capabilities
- Free up to a point then paid

Legal !!!



- What Are the Terms and Conditions For Use of the web API
 - The web API provider company logo must be displayed with the content
 - The content must be displayed in Full
 - The web API provider reserves the rights to revoke access
- How will you enforce the Terms and Conditions
- Other Legal Conversations
 - Sharing of personal information
 - Import / Export regulations



Socialize, Market and Drive Adoption of the Web APIs

How to Attract the “Alpha” Application Developer

- Understand developer motivation for using your web API
- Make the web API easy to find for the intended audience
- Supply supporting documentation and the ability to raise issues, request help
- Provide Tools such as testing tools, Widget Generators
- Provide ideas for possible apps and socialize successful apps
- Establish a community – use Social Media
 - ***Go Where the Developer Hang Out***
- Assign a Product Manager for your web APIs who is business savvy and technically knowledgeable
- Have resources from your project team



How Do You Evaluate Success?



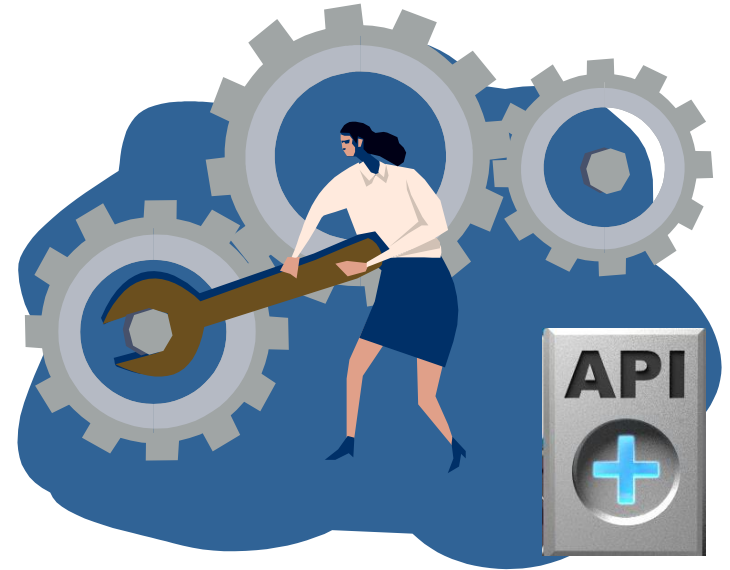
- It Depends On your Business Strategy for Your Web APIs
 - Number of transaction through the web API
 - Number of clicks through to your website
 - Number of Ads that were displayed via the web API
 - Revenue generated from products or services sold over the web APIs
 - Increase in customer satisfaction of your services
 - Increase in brand recognition
 - Number of partners you were able to on board quickly
 - Revenue generated by use of the web APIs themselves

Define the success metrics at the start and have a mechanism to capture and report them!



Plan for The Future and Adjust

- Web APIs are like a product.
 - You can't just let them sit there if you want your business to grow
- Other companies are competing for your Application Developers
 - You need to provide the application developer the web API with the most value
- Use analytics to help you adjust
 - Understand the five W's of your web APIs usages
 - Who, What, Where, When and Why

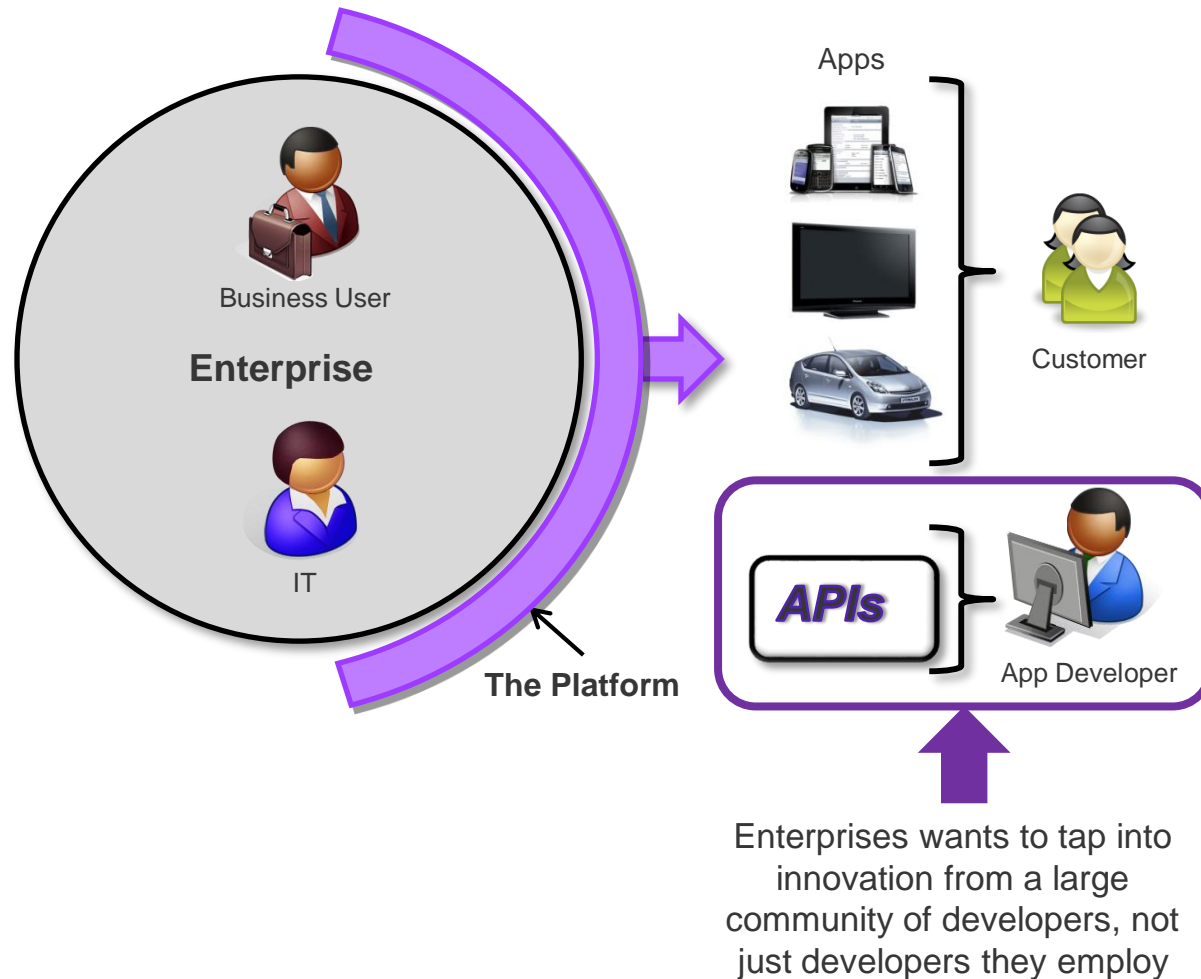


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Companies Need a Single Platform to Become an Engaging Enterprise



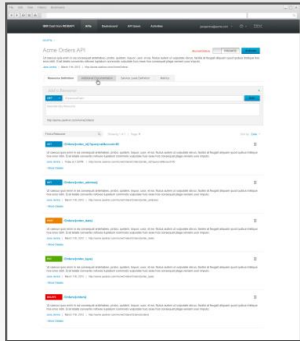
- **Business Users** want to engage **Customers** in new markets
- They need to **Externalize** the **Enterprise**
- They need to get **Apps** in front of these **Customers**
- **Apps** need **APIs** that Externalize the Enterprise
- **App Developers** use **APIs**
- **App Developers** are now **External** to the **Enterprise**
- **IT Guys** need to secure, scale and support the externalized **Enterprise**
- **Business Users** and **IT Guys** needs Insights so they can respond to business needs



IBM WebSphere Cast Iron Live – Web API Services

A Single Solution to Create, Socialize and Manage Web APIs

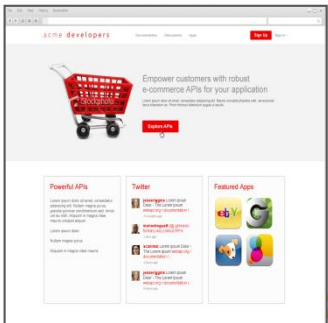
DevOps Dashboard
for easy assembly of new APIs and to
secure and manage APIs from an IT Ops
perspective



**Business Ops
Dashboard**
with analytics and
controls to publish
APIs, document APIs,
set quotas, manage
communities and
monitor service levels

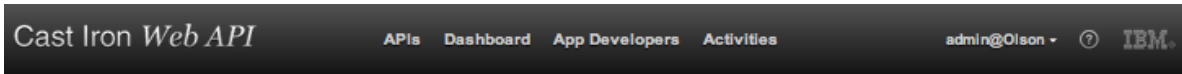


**Application Developer
Portal**
with Self-Service
registration and with
hooks into social
communities



Create APIs Through A Single DevOps Dashboard

Create New API in Days Through Configuration



All APIs > Acme HR API

GET employees

This resource returns the employees first name, last name and phone number
<https://olson.web.castiron.com/acme/employees>

☐ Proxy

Resource Details

Implement Resource

Tasks

Response

Request

Return...

Select Values

Map Values

DB2 Execute Query

DB2 EXECUTE QUERY

+

Response

Available values			Transformation		Input variables		
Field	Type	Sample			Field	Type	Sample
▼ DB2 Execute Qu...							
▼ rows							
▼ row							
EMPNO	xy	000010	●	+	▼ body		
FIRST...	xy	CHRISTI...	●	+	▼ employee	*	
MIDINIT	xy	I	●	+	firstname	xy	
LASTN...	xy	HAAS	●	+	lastname	xy	
WORK...	xy	A00	●		phone	xy	
PHON...	xy	3978	●				
HIRED...	123	1995-01...	●				
JOB	xy	PRES	●				
EDLEVEL	123	18	●				
SEX	xy	F	●				
BIRTH...	123	1963-08...	●				

Define the API

Assemble the API from various datassources

Secure the API

Leveraging IBM's Security and Scaling Expertise

App Keys



Authentication



SSL



Metering



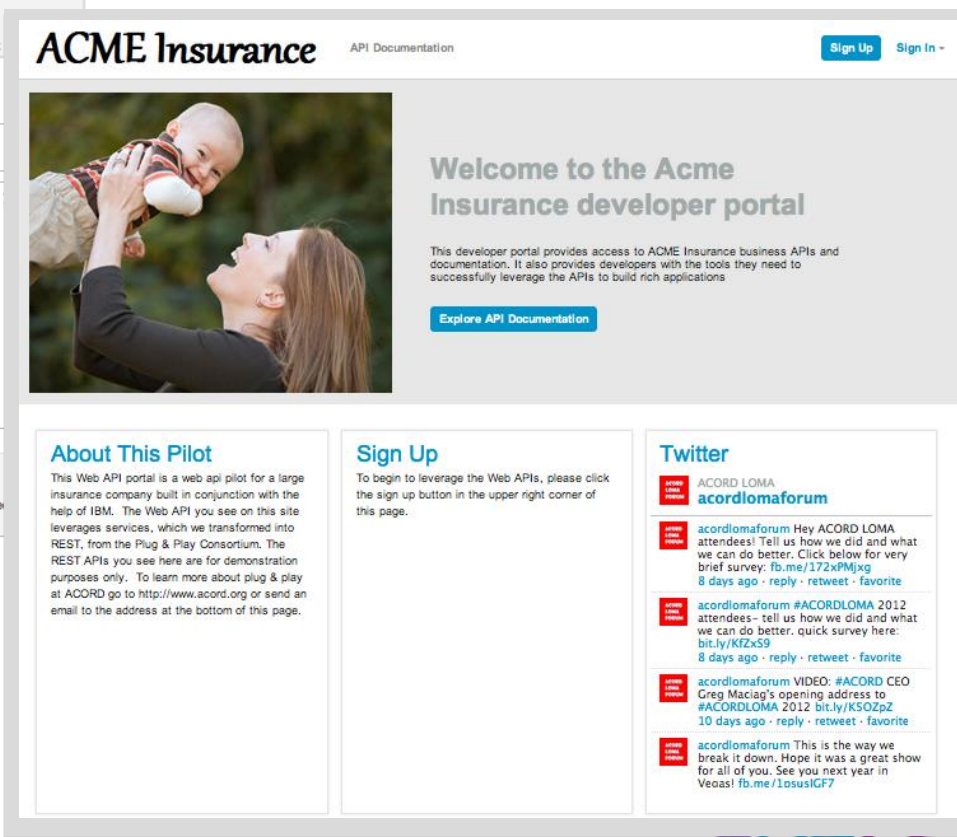
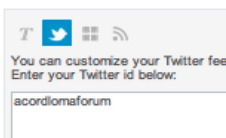
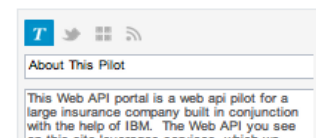
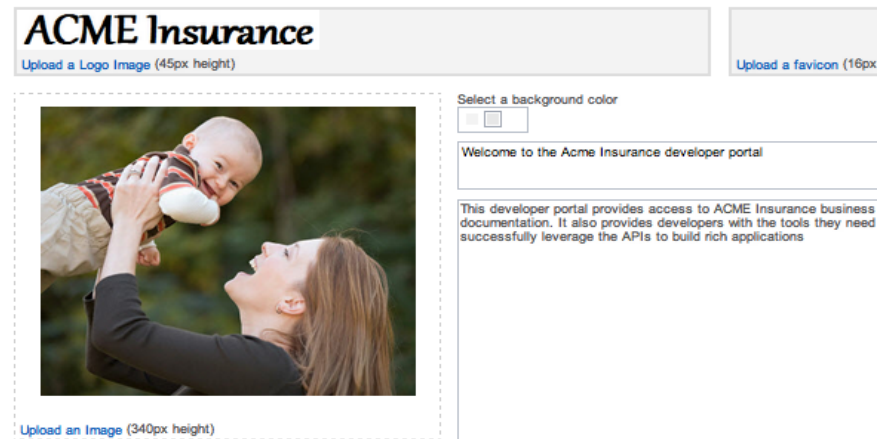
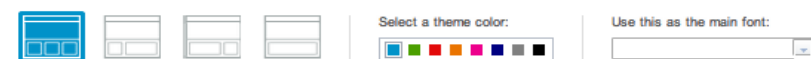
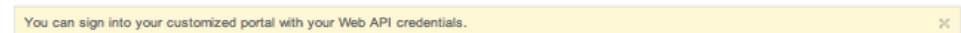
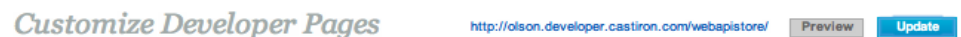
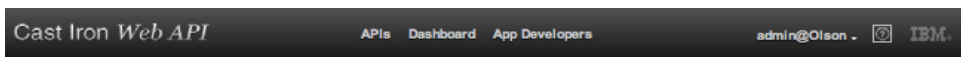
Caching

Socialize The APIs Through A Branded Developer Portal

Configuration Not Coding when Branding Portal



- **Quick** exploration of API
- **Easy** developer sign ups
- **Feature** the developer apps
- **Hooks** into social communities
- **Enables** developers to manage their applications and view analytics



Manage API's with Business Controls



Manage External Experience

- Self documenting APIs
- Ability to add samples and tutorials
- Control Visibility Of APIs



Cast Iron Web API | APIs | Dashboard | App Developers | Activities | admin@Olson | IBM

Acme HR API

API VISIBILITY: acme PUBLIC PRIVATE

+ Add authentication URL

This API provide access to HR information

admin@Olson | Jun 20, 2012 4:22:57 PM | https://olson.web.castiron.com/acme

Resource Definition | More Documentation | Entitlements | Test | Metrics

Add Additional Documentation

Upload a file or Provide a URL Link

Name File or Link

Describe File or Link

EmployeeAPI Test Cases.docx
Test Cases
This document provides test cases for the API

http://www.github.com/acme
Sample application
This is a sample application showing the use of the API

Cast Iron Web API | APIs | Dashboard | App Developers | Activities | admin@Olson | IBM

App Developers

1 REQUESTS | 2 ALL DEVELOPERS

Name	E-mail	Active Since	Invocations this Month
Advanced Level			
Hi, I would like access to the entitlement 'Advanced Level'. Thank you. [Reject] [Approve]			
lauraolson2009 IBM	lauraolson2009@gmail.com	Jun 11, 2012 8:14:29 PM	20
Policy API		Jun 18, 2012 3:11:40 PM	Calls 0
Client API		Jun 11, 2012 8:15:41 PM	Calls 0
Registry API		Jun 18, 2012 3:16:41 PM	Calls 15
GWC SAMPLE API		Jun 20, 2012 9:09:49 AM	Calls 5
Acme HR API		Jun 20, 2012 4:45:46 PM	Calls 0
lauramenke IBM	lauramenke@hotmail.com	Jun 12, 2012 7:37:25 AM	0
Policy API		Jun 12, 2012 7:38:36 AM	Calls 0
Client API		Jun 12, 2012 7:38:36 AM	Calls 0

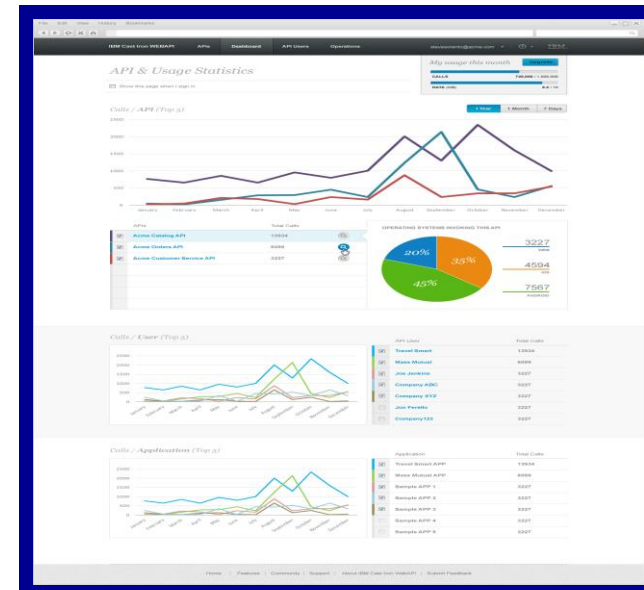


Manage Developers

- Approve requests
- Send email
- Block a developer
- View usage

Manage Through Analytics and Metrics

- Analytics for APIs and Apps
- General free form searches
- Structured Filtered Searches
- Average response time metrics



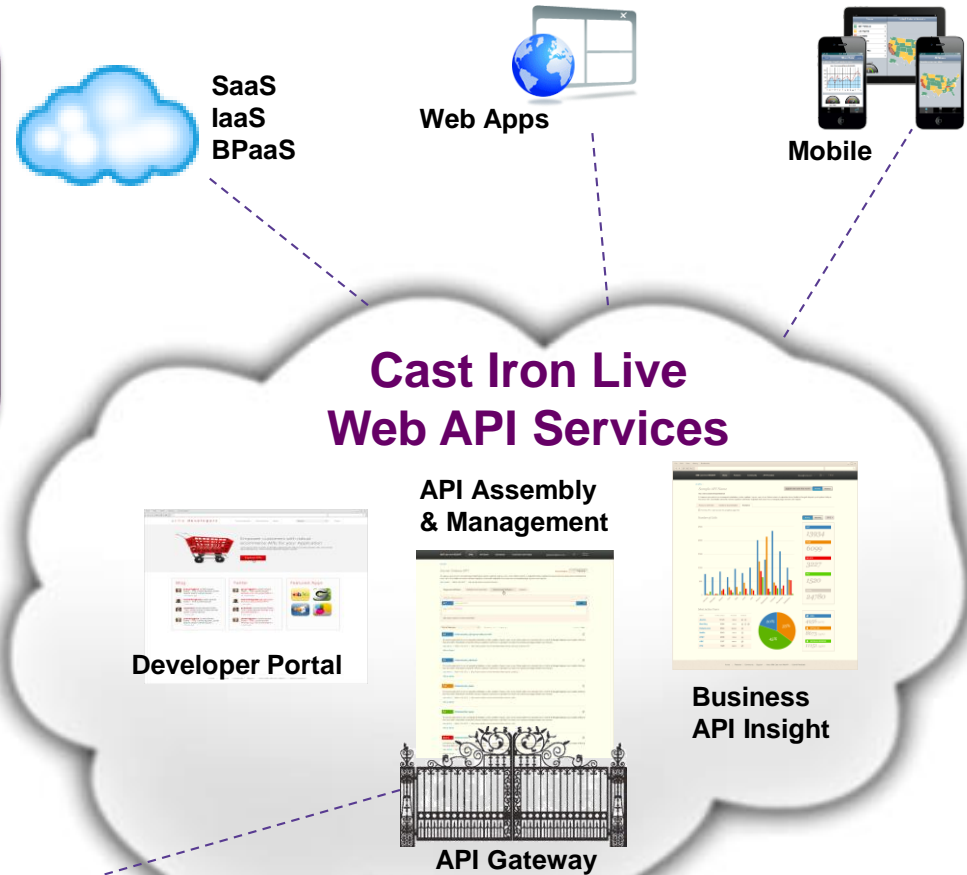
Complete Enterprise Service and API Management Solution

Hardened security :

- XML Firewall
- Service virtualization
- Fine-grained Authorization (OAuth)
- Authentication
- SSL termination

Service and API Management:

- Policy Control
- Visibility across Web APIs and Services
- Lifecycle Management



Enterprise
Services

DataPower

On Premise



WSRR



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Demo: Build a Simple API Assembly Using Cast Iron Live Web API Services

Dinesh Shetty

Senior Certified IT Specialist, ISSW, IBM Software Group



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The Venetian, Las Vegas, NV | April 28–May 2

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New Technology**

<http://www.ibm.com/Impact2013>

IBM Software

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- See Product Demos, Speak to Subject Matter Experts, Take away product assets (whitepapers, videos, datasheets etc)
- **Hear from Industry Experts at our sessions:**

- TSS-1576 : SOA and APIs**
► [Show Details](#)
- TSA-3281 : Meet the Experts: Web API Trends, Challenges and Requirements**
► [Show Details](#)
- TSA-1416 : Introduction to IBM API Management and What's New**
► [Show Details](#)
- TSA-1891 : Driving Business Innovation and Growth through APIs**
► [Show Details](#)
- TSA-2678 : Introduction to Web APIs**
► [Show Details](#)
- TSA-1500 : Hands-On Lab: Building a Web API Management Solution with Cast Iron Web API**
► [Show Details](#)
- TSA-2763 : Extending Enterprise Integration with IBM API Management**
► [Show Details](#)



Where to Begin to Enter the API Economy?

**Free
90 Trial**

<http://webapi.castiron.com>

See recorded demo: <http://www.ibm.com/webapi>



Questions & Answers

Q&A

Edge of the Enterprise Integration



For More Information

IBM Cast Iron Live Web API Services



90 Day Free trial

<http://webapi.castiron.com>

Demo

<http://www.ibm.com/webapi>

API Management – Publish and Secure Web, Mobile Services

<http://www-01.ibm.com/software/websphere/products/connectivity-integration/api-management/>

Views Sessions

View entire series on demand



Select from right

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Security & Integration in a Wider-Connected World

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A 2013 Competitive Review of SOA Appliances

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