

Open Source Technology Adoption

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October 30, 2008



Agenda



- Introduction
- Open Source
- Web Consolidation Project
- DER Project
- CPR Project
- Open Source Technologies at WellCare
- On The Bleeding Edge
- Lessons Learnt
- Actions
- Q&A
 - Please hold questions to the end

Introduction



- WellCare Vision
 - To be the leader in government sponsored healthcare programs in partnership with the members, providers, governments, and communities we serve.
 - Medicare
 - Medicaid
- Open Source initiative started in May 2007 ...

Open Source is **NOT** Free Software

- Support
- Training
- Frequent Upgrades
- Time to learn new products
- Easy to “just” download
 - Multiple versions of the same product
 - Many products performing similar functions
- Contribute changes back to community
 - Otherwise very difficult to upgrade to new releases
- Hot today gone tomorrow

“Viral” Licenses

- GPL– GNU Public License
 - Code enhancements must be made publicly available
 - Redistributed code automatically becomes GPL
- AGPL – GPL for Web Applications
 - Not Common
 - Do not use anything with this license

Open Licenses

- Apache, ...

Other

- LGPL – Lesser GNU Public License
 - Can be used in redistributed software without making everything LGPL

For Internal Use Only!

- Do not redistribute any software outside of your organization!!
 - Distribution requires prior review of all open source licenses by Legal

Benefits

- Access to the source code
 - Enhance/fix products to WellCare needs
- Reduced dependency on shrinking number of Closed Source Vendors
- Standards Based
- More users => More robust
- Cost reduction
 - No upfront capital costs
- Low risk of entry
 - Easily replaced

Commercial Support

- Mandatory for all major components
 - Operating System
 - Database
 - Application Server
 - Applications
- Best of Breed Open Source Products
 - Supported by different Vendors
 - Who's problem is it?
 - Higher Cost
- Complete Stack from Single Vendor
 - Single point of contact for support
 - Can limit options

Product Selection

- Use of one product in each category
 - Support, Maintenance!
- Standardize on versions
 - Newer versions can only be used after testing and evaluation
- Review
 - Tests included in source code
 - Documentation
 - Source Code
 - Code check-in activity
 - Commercial and Community Support for product
 - Training
- First evaluate in a Proof Of Concept

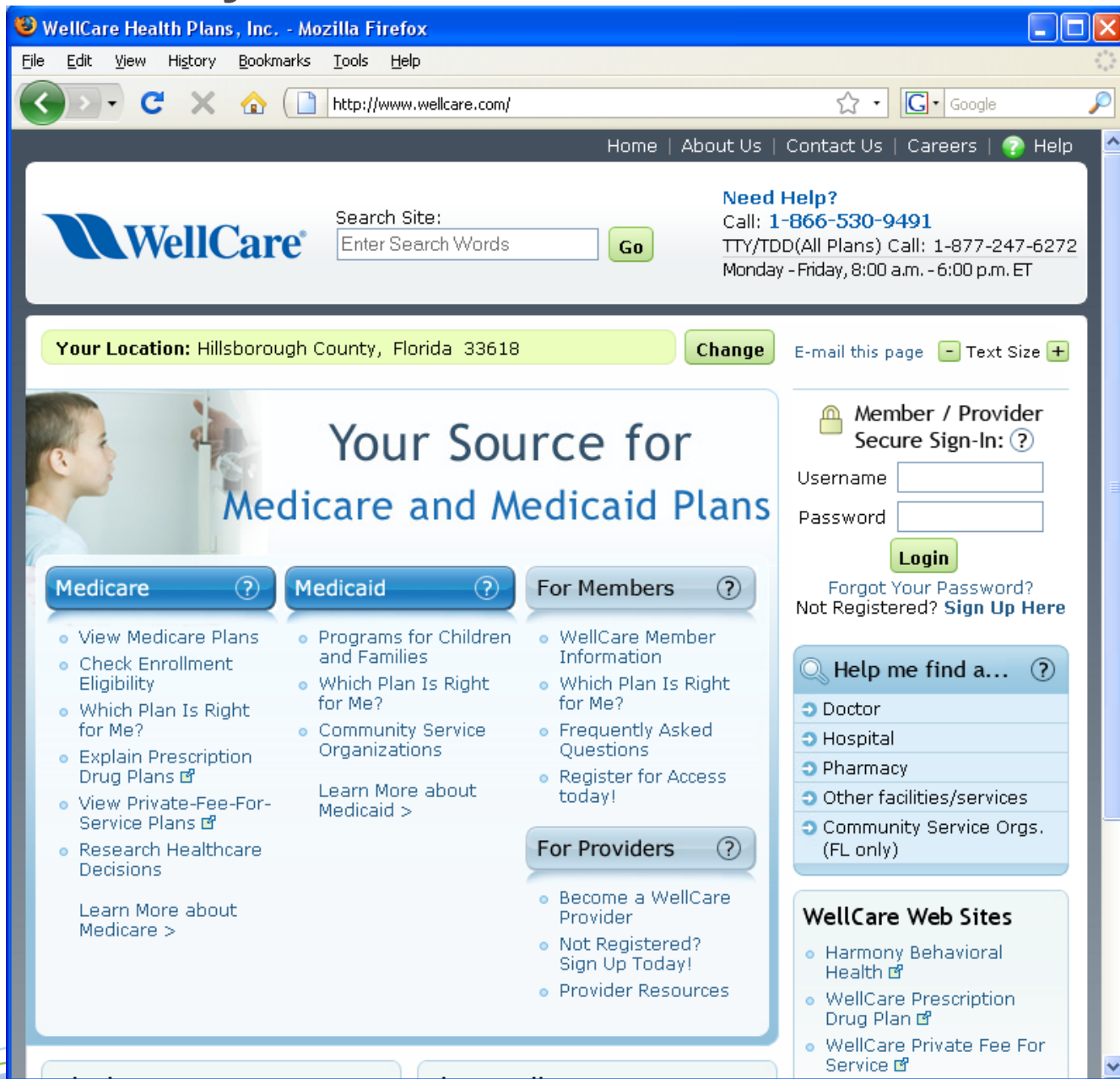
Success Story #1



Web Consolidation

- Consolidate numerous state specific Windows C# applications into a single manageable application
- Technologies (LAMP stack)
 - Red Hat Enterprise Linux Servers
 - Apache Web Server
 - MySQL Database
 - Ruby on Rails
 - Web 2.0
 - Rapid Development
- Benefits
 - Over 14 million page views per month (> 500% Increase)
 - Reduced time to market
 - New states in 4 weeks vs 4 months (> 400% Reduction)
 - State specific
 - Look and feel
 - Rules and Regulations
 - Business now creates and maintains content
 - Ease of maintenance
 - Replaced 234,000 lines of C# with 29,000 Lines of Ruby Code
 - Added 12,000 Lines of Test Code
 - Member & Provider Web self-service dramatically reduces call-center calls
 - Solution scales as needed to support future member growth

Success Story #1 ...



The screenshot shows the WellCare Health Plans website in a Mozilla Firefox browser window. The address bar displays <http://www.wellcare.com/>. The website header includes navigation links: Home, About Us, Contact Us, Careers, and Help. A search bar is located in the top right, with the text "Search Site:" and a "Go" button. Below the search bar, the text "Need Help?" is followed by contact information: "Call: 1-866-530-9491", "TTY/TDD(All Plans) Call: 1-877-247-6272", and "Monday - Friday, 8:00 a.m. - 6:00 p.m. ET".

The main content area features a green banner with the text "Your Location: Hillsborough County, Florida 33618" and a "Change" button. To the right of the banner are links for "E-mail this page" and "Text Size". Below the banner, the heading "Your Source for Medicare and Medicaid Plans" is displayed. Under this heading, there are three main sections: "Medicare", "Medicaid", and "For Members".

- Medicare**
 - View Medicare Plans
 - Check Enrollment Eligibility
 - Which Plan Is Right for Me?
 - Explain Prescription Drug Plans
 - View Private-Fee-For-Service Plans
 - Research Healthcare Decisions
 - Learn More about Medicare >
- Medicaid**
 - Programs for Children and Families
 - Which Plan Is Right for Me?
 - Community Service Organizations
 - Learn More about Medicaid >
- For Members**
 - WellCare Member Information
 - Which Plan Is Right for Me?
 - Frequently Asked Questions
 - Register for Access today!

Below the "For Members" section, there is a "For Providers" section with the following links:

- Become a WellCare Provider
- Not Registered? Sign Up Today!
- Provider Resources

On the right side of the page, there is a "Member / Provider Secure Sign-In" section with fields for "Username" and "Password", a "Login" button, and links for "Forgot Your Password?" and "Not Registered? Sign Up Here". Below this is a "Help me find a..." section with a search icon and a list of options: "Doctor", "Hospital", "Pharmacy", "Other facilities/services", and "Community Service Orgs. (FL only)". At the bottom right, there is a "WellCare Web Sites" section with links to "Harmony Behavioral Health", "WellCare Prescription Drug Plan", and "WellCare Private Fee For Service".

Success Story #1 ...

WellCare of Georgia, Inc. - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://gaprovider.wellcare.com/

Home | About Us | Contact Us | Careers | Help | En Español

WellCare
of Georgia, Inc.

Search Site:
Enter Search Words **Go**

Need Help?
Call: **1-866-231-1821**
TTY/TDD(All Plans) Call: 1-877-247-6272
Monday - Friday, 7:00 a.m. - 7:00 p.m. ET

Your Location: Please click Change to enter your location. **Change** E-mail this page Text Size +

Your Source for Medicaid Plans

Georgia Families **For Members** **For Providers**

- Programs for Children and Families
- Georgia Families
- PeachCare for Kids
- Learn More about Medicaid >
- WellCare Member Information
- Frequently Asked Questions
- Register for Access today!
- Become a WellCare Provider
- Not Registered? Sign Up Today!
- Provider Resources

Member / Provider Secure Sign-In: **?**

Username

Password

Login

Forgot Your Password?
Not Registered? **Sign Up Here**

Help me find a... **?**

- Doctor
- Hospital
- Pharmacy
- Other facilities/services

Find A Georgia Dental Provider

WellCare - Georgia

WellCare is a leading provider of government sponsored health plans such as Medicaid, Medicare, and State Children's Health Insurance Programs. We are the largest Medicaid and Medicare Company in the United States. We also serve more Medicaid and Medicare members in the Southeast than any other health plan. Our local operations in Georgia serve individuals and families who are eligible for Medicaid and PeachCare for Kids. With over 20 years of experience WellCare is committed to providing industry leading service to its

WellCare Web Sites

- Harmony Behavioral Health
- WellCare Prescription

Success Story #1 ...

WellCare Health Plans, Inc. - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.wellcarepdp.com/

WellCare
Your Medicare Rx Provider

Need Help?
Call: 1-888-547-5252
TTY/TDD (All Plans) Call: 1-888-816-5252
Monday - Sunday, 7:00 a.m. - 2:00 a.m. ET

[Enroll Now](#)

[Home](#) [About Us](#) [About PDPs](#) [Our Plans](#) [Example Savings](#) [Medication Guide](#) [Our Pharmacies](#) [Contact Us](#)

Welcome

Save on prescriptions the easy way.

Want low premiums? Low co-pays? Easy-to-understand plans? **Then you need WellCare.**

WellCare has been in business for over 20 years. We provide managed care services exclusively for government health care programs and prescription drug plans. We know how to create plans that are easy to understand, easy to use, and give you real savings.

In addition, prescription drug plans can provide peace of mind knowing you are covered.

[Learn more](#)

"At last, someone's making it simpler."

Private Fee-For-Service Plans.
Get more for your health care dollar. There are no referrals or authorizations required. All for low or no premiums.

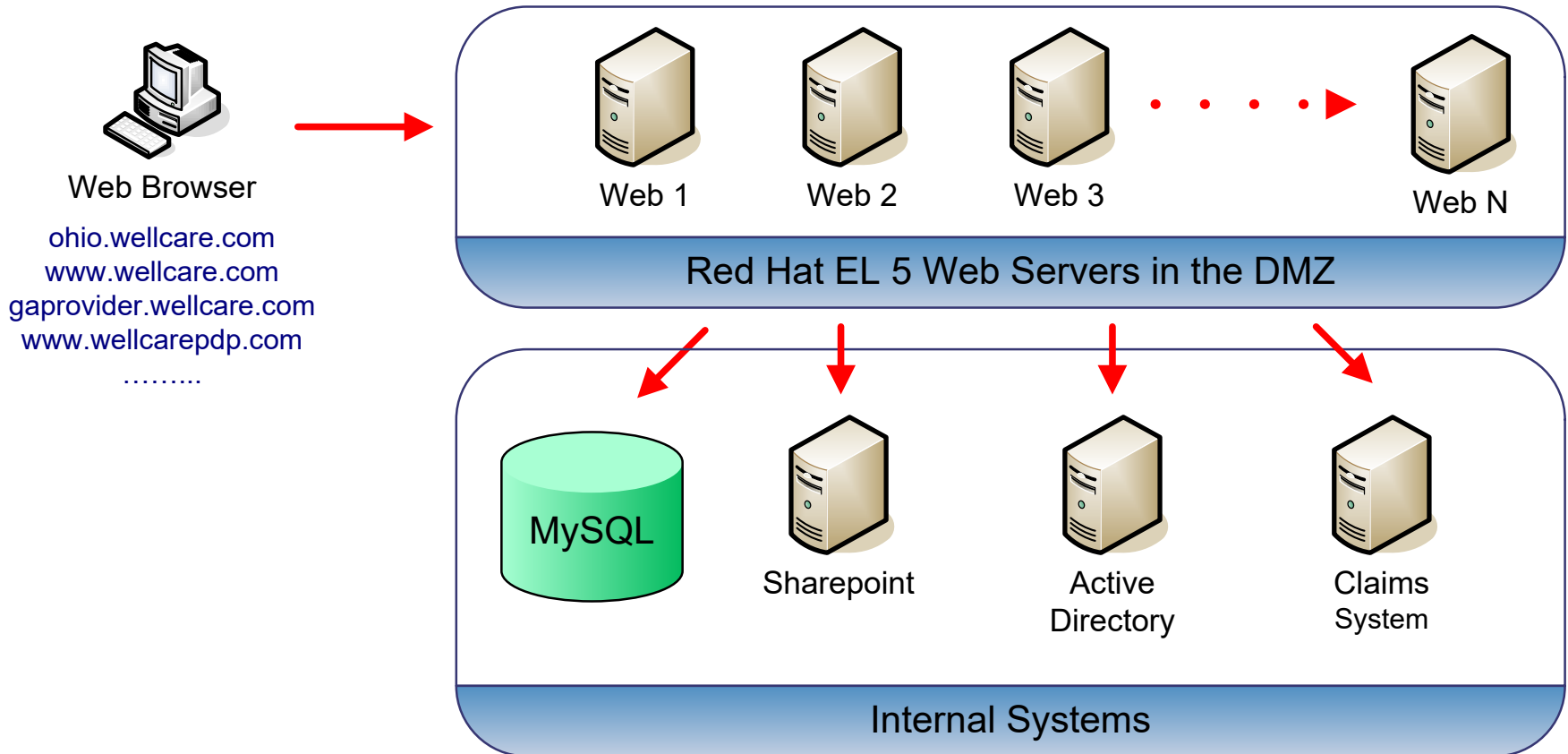
[Learn more](#)

About our plans.
The benefits and costs in your state.

[Learn more](#)

How PDPs work.
WellCare makes this benefit easier to understand.

Success Story #1 ...



Success Story #2



Drug Exception Reports (DER)

- Human Workflow to automate the processing of Drug Exception Reports
 - States have different compliance rules
- Technologies
 - Java
 - jBPM
 - JBoss Application Server
 - Cluster for high availability with hot failover
 - MySQL with near real-time replication
 - Red Hat Enterprise Linux Servers
- Benefits
 - Centralized Status tracking of all DERs
 - Real-time Monitoring and Alerting to ensure compliance with regulatory SLAs
 - Account for 100% of all submitted DERs
 - Automate manual steps
 - Member Eligibility
 - Approval/Denial decision rules
 - Allow existing staff to handle additional work load

Success Story #3



Enterprise Service Bus Architecture

- Web Services
 - Expose Claims System
 - Member Eligibility
 - etc....
- Technologies
 - JBoss EAP
 - Red Hat Enterprise Linux
- Benefits
 - Remove direct database connections
 - 4 months in production
 - Over 2 million transactions per month
 - Systems using the ESB in production
 - Medical Authorizations
 - DER
 - Salesforce
 - Projects moving to use the ESB services
 - Web Consolidation
 - IVR - Automated Attendant

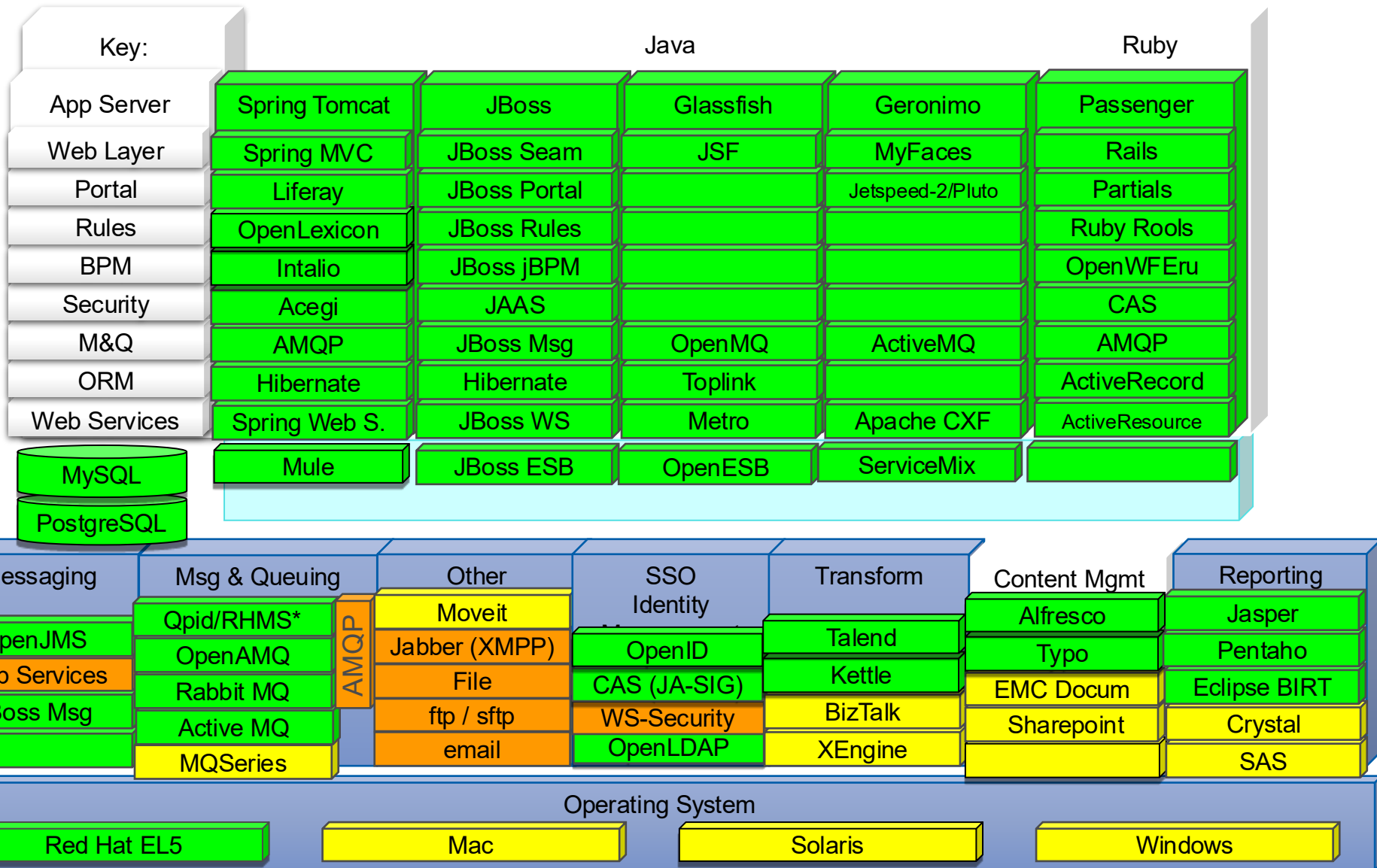
Success Story #4



Claims Production and Reporting Project

- Manage the process by which failed claims are corrected
- Replace existing Visual Basic Application
 - Constant Failures
 - Maintain Compliance
- Technologies
 - Java
 - JBoss Application Server
 - Red Hat Enterprise Linux Servers
- Benefits
 - Centralized Status tracking
 - Ensure compliance with regulatory SLAs
 - Meet Auditability requirements
 - Better visibility to management

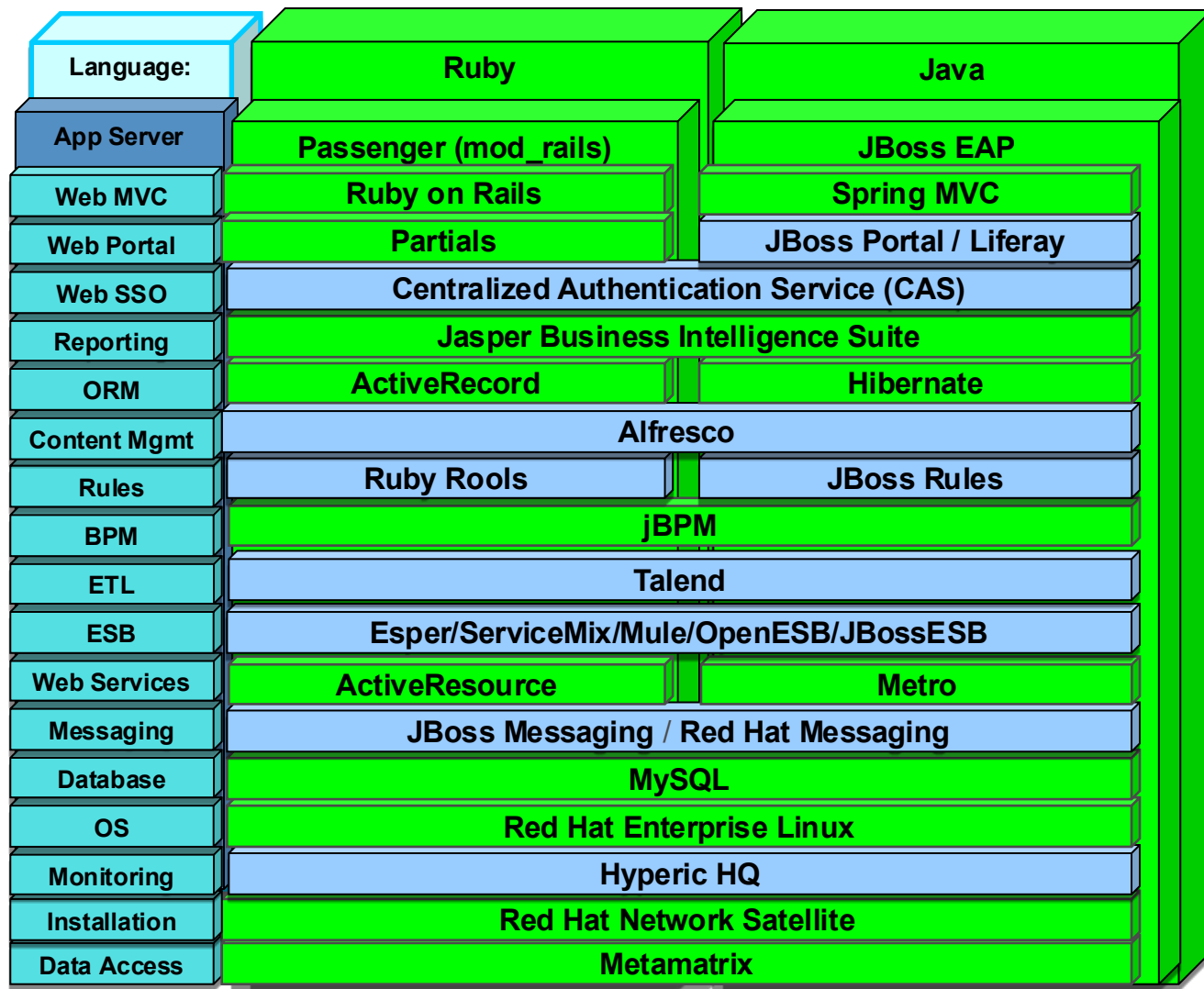
Open Source: So Many Choices...



Color Key:



Open Source Stack



Color Key:

Standard

Emerging

Declining

Restricted

Considering

Currently in Production:

- JBoss EAP
- jBPM
- Red Hat Enterprise Linux
- MySQL Databases
- Jasper Business Intelligence Suite
 - Reporting
 - Dashboards

In Test environments:

- Redhat Network Satellite
 - Install & Keep systems up to date
- Metamatrix
 - Easily create SOAP Web Services from existing data sources
 - Create a single query across MySQL and Oracle
- Hyperic HQ
 - Enterprise Monitoring across Windows, Solaris and Linux
- Alfresco

Event Driven Architecture

- Complex Event Processing
 - Esper
 - Applications respond to the occurrence of an events
 - Not waiting for some window to do batch processing
 - Move away from database polling
 - Processing of events as they occur
 - Promotes loosely coupled components/services that depend on events, not other applications or their processes that change over time
 - Asynchronous Communication

Business Activity Monitoring

- Real-time dashboards

Lessons Learnt

- Budget for Expense not Capital
 - Open Source annual support is an Expense
 - Proprietary products require upfront Capital Expenditure
- Proof Of Concept
 - Try new technologies before starting a major project
- Pick your battles
- Excellent commercial support is priceless

Actions

- Evangelize Open Source
- Shared Knowledgebase
- Product Evaluation Process

Q&A

Contact Info

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