Software Engineering in the Real World

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Guided By A Singular Vision
The Network Is The Computer.

The **Global Power of Sun**

Global

- Business Presence in 160 Countries
- Fortune 184
- 34,400 employees*

Innovation

- 11,000+ patents
- $2 billion annual R&D

Business Strength

- $13.8 billion annual revenue**
- $3.8 billion cash*

Communities

- 12.8 million Solaris licenses
- 6+ million Java developers
- 5.5+ billion Java devices

Project Description:
End-to-End Systems Management

End-to-End Systems Management	Automation of Data Center	Security and Compliance
• Virtualization management • Keep guests up to date	• Increase productivity • Baremetal discovery and provisioning • Keep environments up to date	• Create profiles for the enterprise • Confidence with compliance reporting

Sun xVM Ops Center 1.0

Ops Center Provides an Amazingly Easy-to-Use Interface to Manage Rapid Growth in Your IT Environment

DISCOVER	Scan and identify servers across your network, even when powered off
PROVISION	Hands-off installation of Linux and Solaris onto both bare metal servers and virtual environments
UPDATE	Stay secure and up-to-date with patch management tools for RedHat, SUSE and Solaris
MANAGE	Securely manage users and assets with the best knowledge about your Sun gear
REPORT	Assure compliance with the industry's first compliance auditing solution

Product Complexities

- Product needs to be out the door by June
- Consolidation of two existing code bases
- New market: Virtualization

People Complexities

- 150 engineers:
  - > Division of labor
  - > Definition of interfaces: who does what by when ?
- Around the world – different timezones
  - > Time for meetings
  - > Holidays
- Cultures
  - > Do not offend...
- Communications

Development Complexities

- How do we get started ?

- What development tools do we use ?

- How do we manage iterations, schedules, milestones ?

- What methodology, what tools ?
  > Agile / Waterfall
  > Unit tests, Regression, ...

- What is the migration process for current customer base ?

- How to manage more than one deliverable at a time ?

Non-Engineering Challenges

- Documentation and Training
- Support and Sustaining Tiers
  - > Customer Escalations
- Marketing
- Sales, VARs and ISVs

Basic Rules

- Do NOT break the build !!!!!!

- Take ownership, try to help:
  - > "I've tested my code, and it works – you have a problem invoking my code"

- Seek help when you get stuck

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Questions for the New Comers ?

- Do I understand the field of use / customer ?
  - > How does the customer use the product ?
  - > What does the competitor's product do ? What are the pros and cons ?
- Do I understand the technology ?
  - > Why have we chosen MySQL ?
  - > What are the key features and functionality – how can I become an expert ?
- Do I understand the environment / processes / cultures ?
- What will I be measured against ?

Engineer's Profile

What We Want

- Self Starters

- Technically Aggressive (risk takers)

- Execution

- Actively communicates

- Knows when to innovate and when to follow

- Curious, likes new stuff, desire to learn new things

- Can just dig in and figure it out; good with ambiguity

- Sees new ways to problem solve

- Culturally aware

What We Don't Want

- Execution focused; just give me a plan I'll do it; low tolerance for ambiguity

- Can see new ways to do thing but won't/can't apply them

- Closed doors – People who sit in their cubes and never communicate in a distributed organization

What am I looking for ?

- Write code from scratch
- Not maintenance
- Not testing
- Cool technology

What you should be looking for ?

- What is my role in the group ?
- Do I have whom to learn from ?
- What is the level of independence that I have ?
- What are my growth opportunities ?
    - > Were will I be in 5 years ?
    - > What do I want to be when I grow up ?
    - > What are my strengths ? Weaknesses ?
- Does the work environment fit my needs ?
- Will it be fun to come to work ?

Thank You !!!

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