



Embedded Linux in Asia

Is it the far side of the community?

CE Linux Forum / Sony corp.

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(LinuxCon Japan 2010)





Welcome to my session

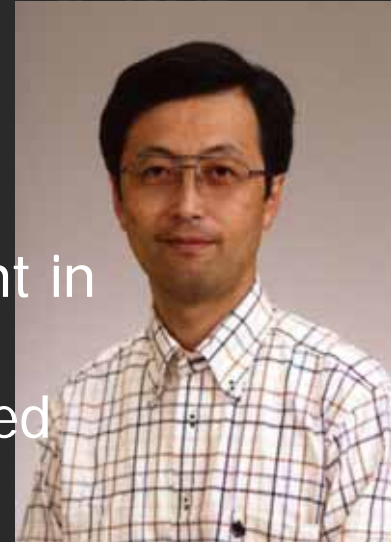
Who am I?

I am “Marketing Group Chair” of CE Linux Forum.

I have been together with the forum since the establishment in 2003.

I have been trying to reinforce harmonizing Linux and related OSS communities and embedded system developers.

I am working for Sony, though many of my friends and managers always ask me “what company are you working for?”



... My answer is “Panasonic” ☺ .



What is Community?

First of all, I'd like to ask a question



Can you distinguish *community* from *just a crowd of people*?





A friend of mine replied

He is an evangelist of digital film making and the community

It is something like “Quantum Science”.

It is meaningless to consider “what community is”.

Because, even if you try to capture the quantum (essence of community), it will no longer there to exist.

Only one way to get the right answer is to join the community by yourself!



I support what he said.

But I dare to reply what community is.



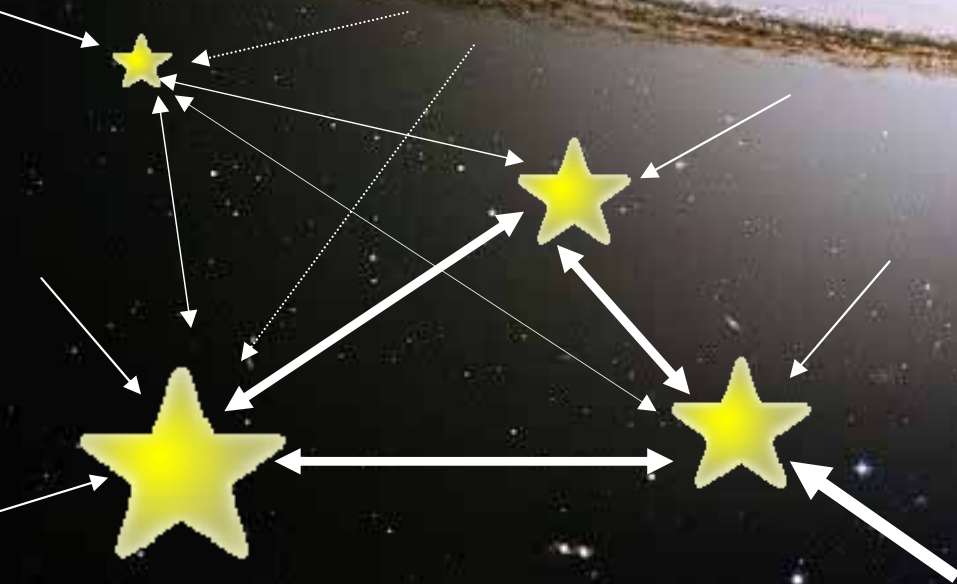
Community is

Something like the Galaxy



Mutual effect

The Galaxy

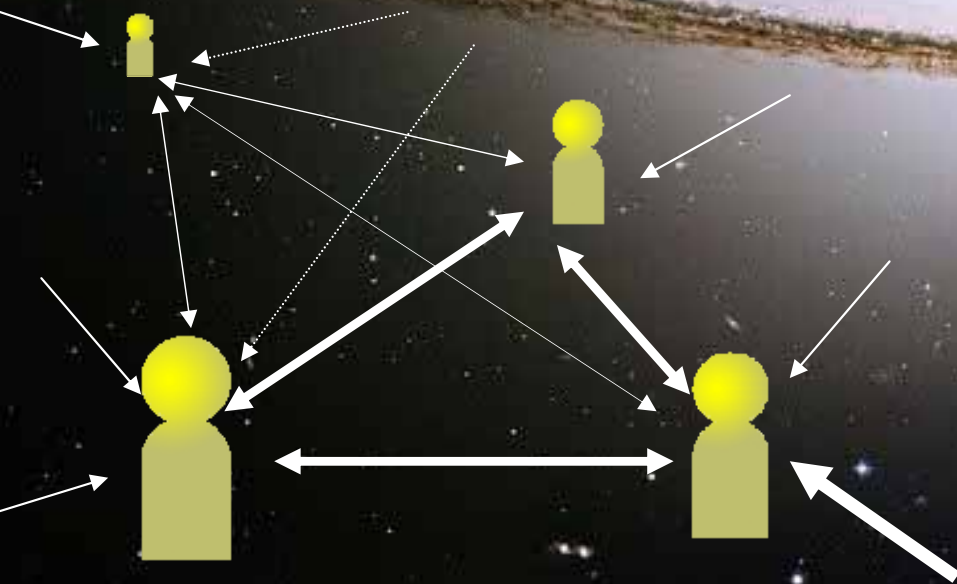


Gravities among huge amount of stars make up the Galaxy



Mutual effect

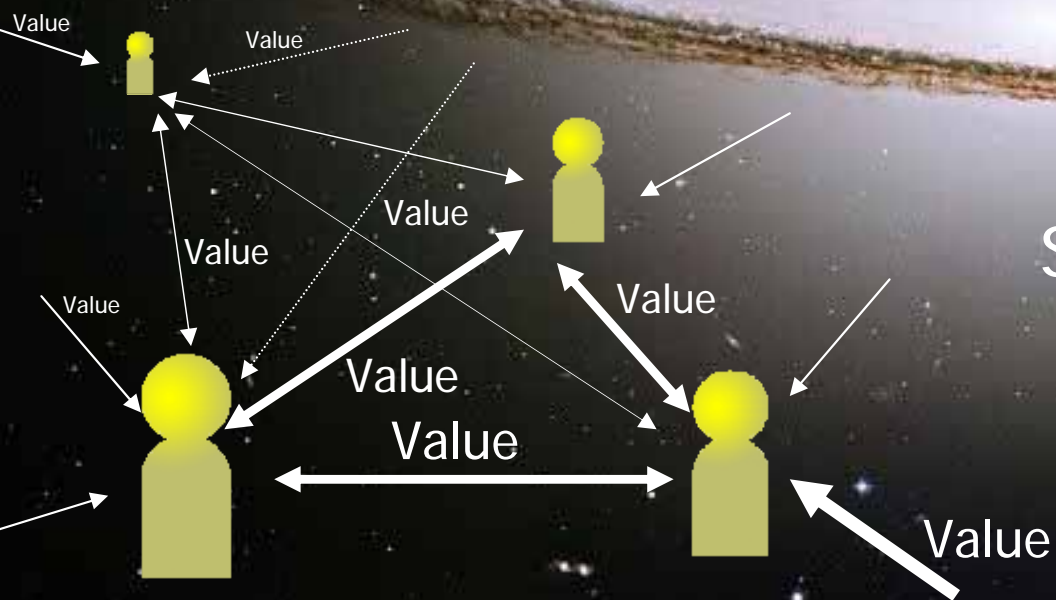
Community



Gravities among very many people make up the community



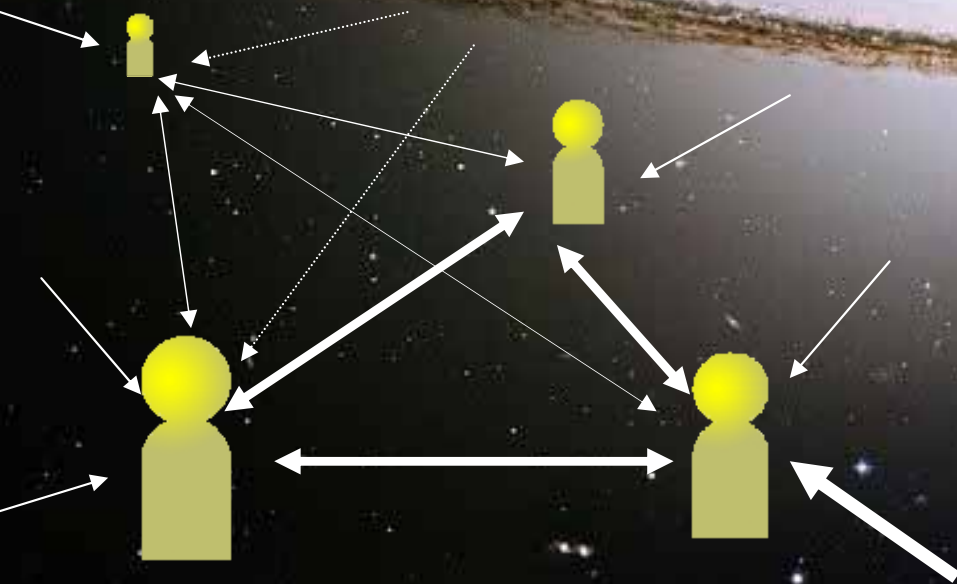
What is the Gravities among people?



Sharing the value recognition



What is recognized as Value in the Linux Community?



Keep on evolving the best operating system and the surrounding software



“Embedded” is it far side of community?



Do you think Embedded system developers are living at the far side of the community?





“Asia”

is it far side of community?



Do you feel Asia is too far from the core of the community?

Do you feel community is too far from Asia or embedded system design?



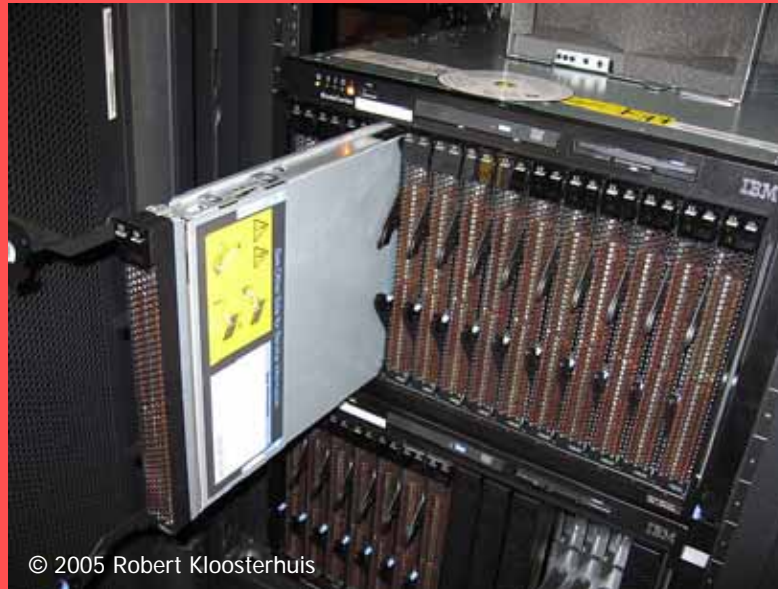
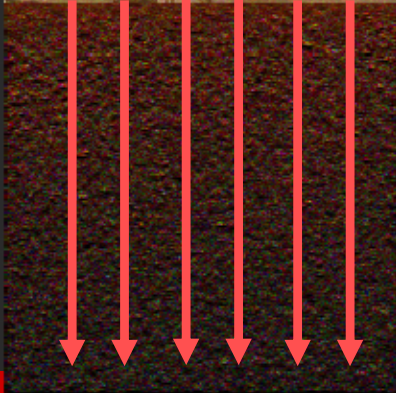
Here are facts



- Like groundwork of great construction
- Linux and the related OSS became great “unsung hero”

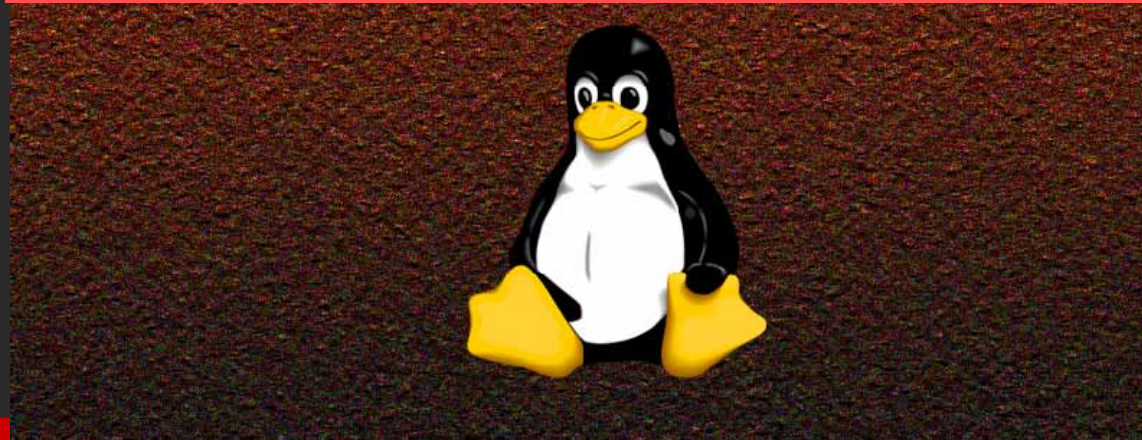


Unsung hero



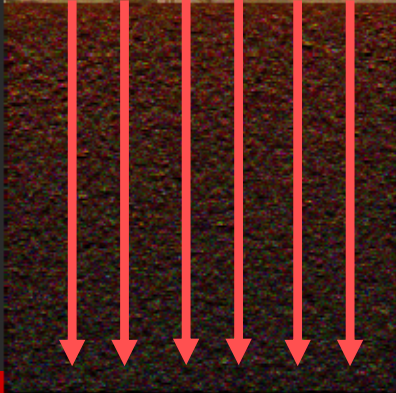
Enterprise
server system

Network social
infrastructure



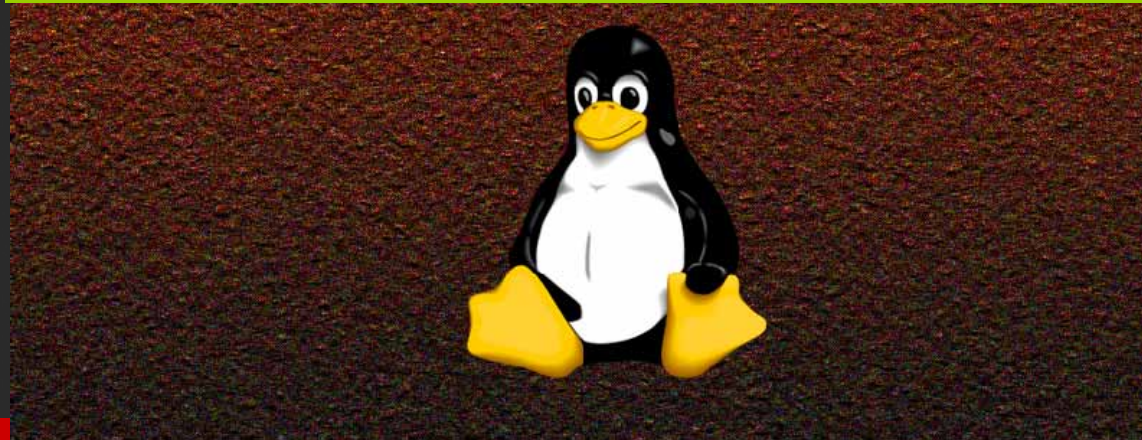


Unsung hero



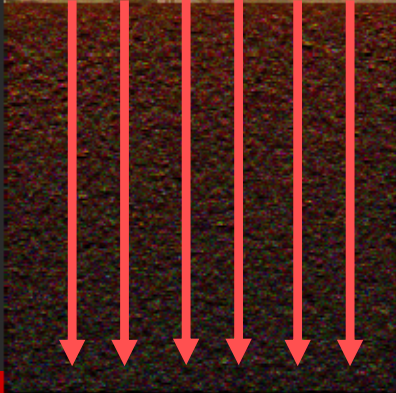
Digital
Television

Blu-ray player
recorder





Unsung hero



Digital Camera

HD Video
Camcorder

Portable audio
players





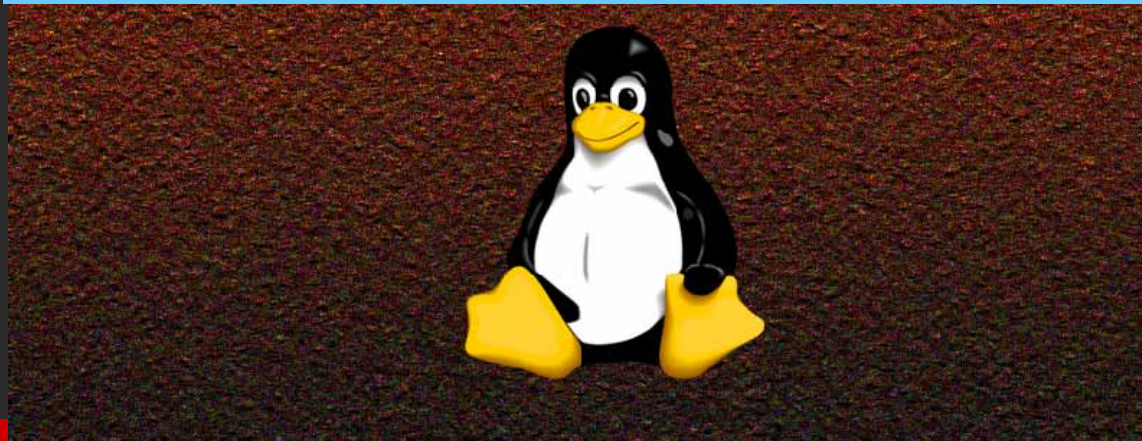
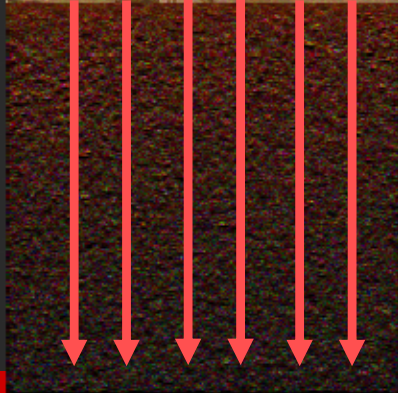
Unsung hero



MeeGo

Cellular Phone

Smart Phone





“Embedded” is far side of community

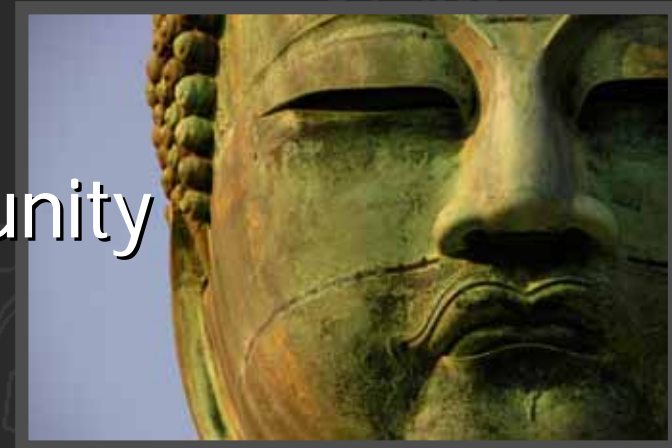
- In fact
 - Different requirement
 - Various CPU architecture
 - Less memory
 - Sometimes even no console required
 - Very quick boot up and savior real time
 - Unusual device support
 - Less visibility in the community
- **Is it true that “Embedded” is at far side?**
 - Actually many consumer electronics products are fully utilizing Linux





“Asia” is far side of community

- In fact
 - Less participation to the community
 - Hesitation to speak out in English
 - Different time
 - Less understandings of managements and company
- Is it true that “Asia” is at the far side?
 - Great deal of engineers are adopting Linux for their embedded products





Here is another fact



Cellular Phone



Enterprise server system



Power Management

It tells that coming to the community core makes great difference to embedded system oriented people, either!





Tell us!

Aren't there another facts to say "Embedded" is not the far side of the community?

Aren't there another facts to say "Asia" is not the far side of the community?



Those facts imply

Embedded developers **are not** (should not be)

Asia **is not** (should not be)

*far side of the
community*



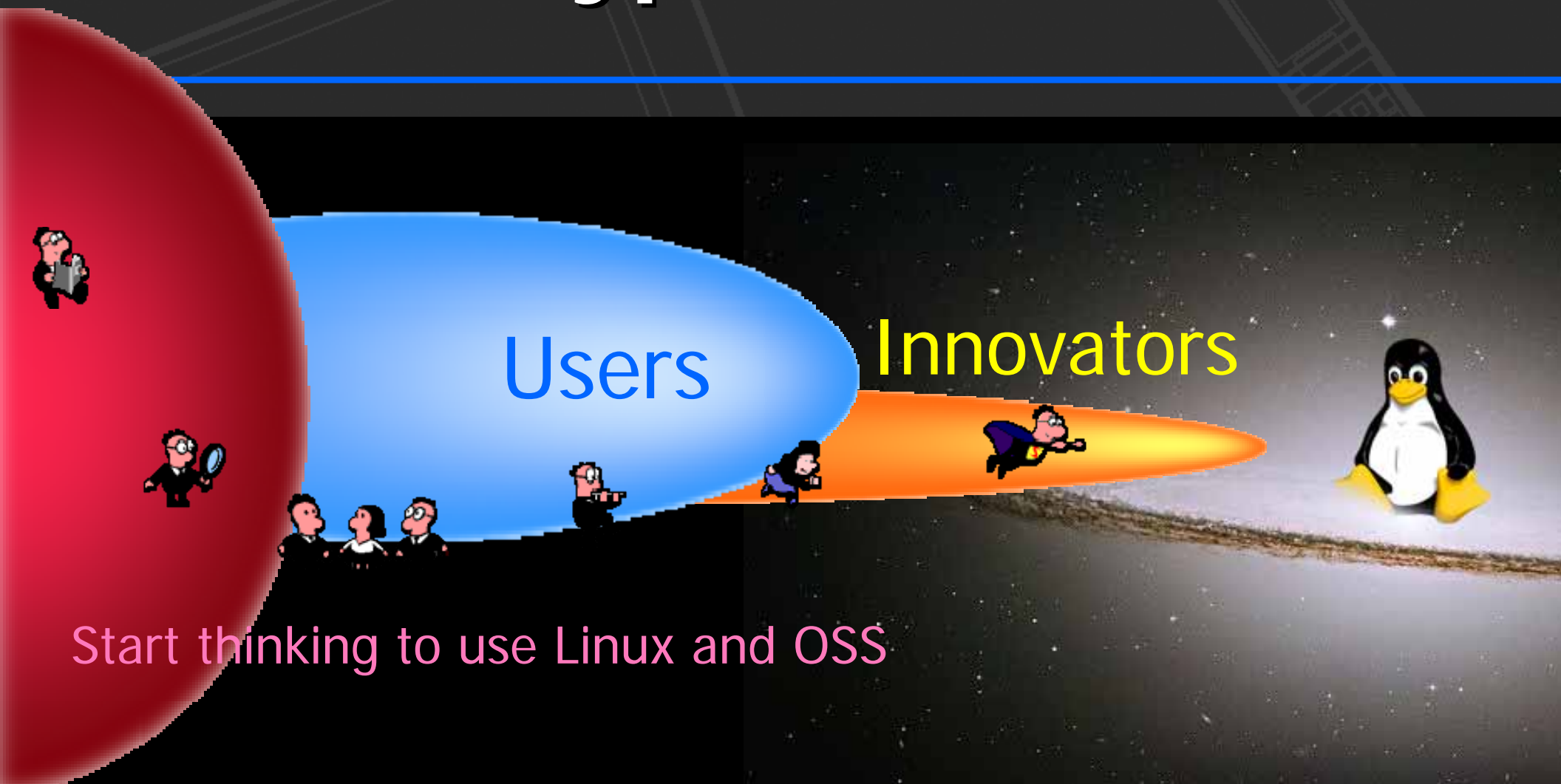


Just biting?





Three types



Start thinking to use Linux and OSS



Innovators

- Role in the community
 - Initiate the evolution
 - Communication
 - Harmonization among various requirements and solutions
- Bridge between actual system development scene and community
- Ensure the future prospect to keep along with Linux





Users



- Role in the community
 - Tell what you need (requirement) to the community
 - Tell your new ideas to improve
 - Report the bugs you encounter and your solutions if you have
- They empower to the innovators
- The innovators will bridge you and community
- The majority of Consumer Electronics Asian embedded developers



How to foster the Innovators?

Tell us of your suggestions!





How to encourage Users?

Tell us of your suggestions!

How to let them speaking out of their desire?
What will motivate them to report the bugs?
What will be the obstacles?





Finally, Let's say "welcome"!

To the people who start thinking to use Linux and OSS

- Consumer Electronics embedded systems
 - May be the pioneer of Linux for use of embedded system together with the carrier grade equipments
- Many of the other embedded systems developers may start using Linux and related OSS intensively