

# ErlangPro



*Massive Solutions Ltd.*



# Our vision

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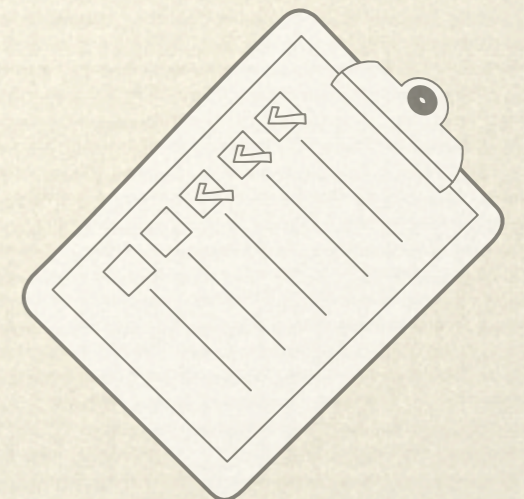
- ❖ Erlang is the great language
- ❖ But this candy really needs a wrap!
- ❖ Many aspects of deployment and usage of Erlang distributed apps should be simplified and automated
- ❖ Managing of distributed configurations is headache that should be healed somehow



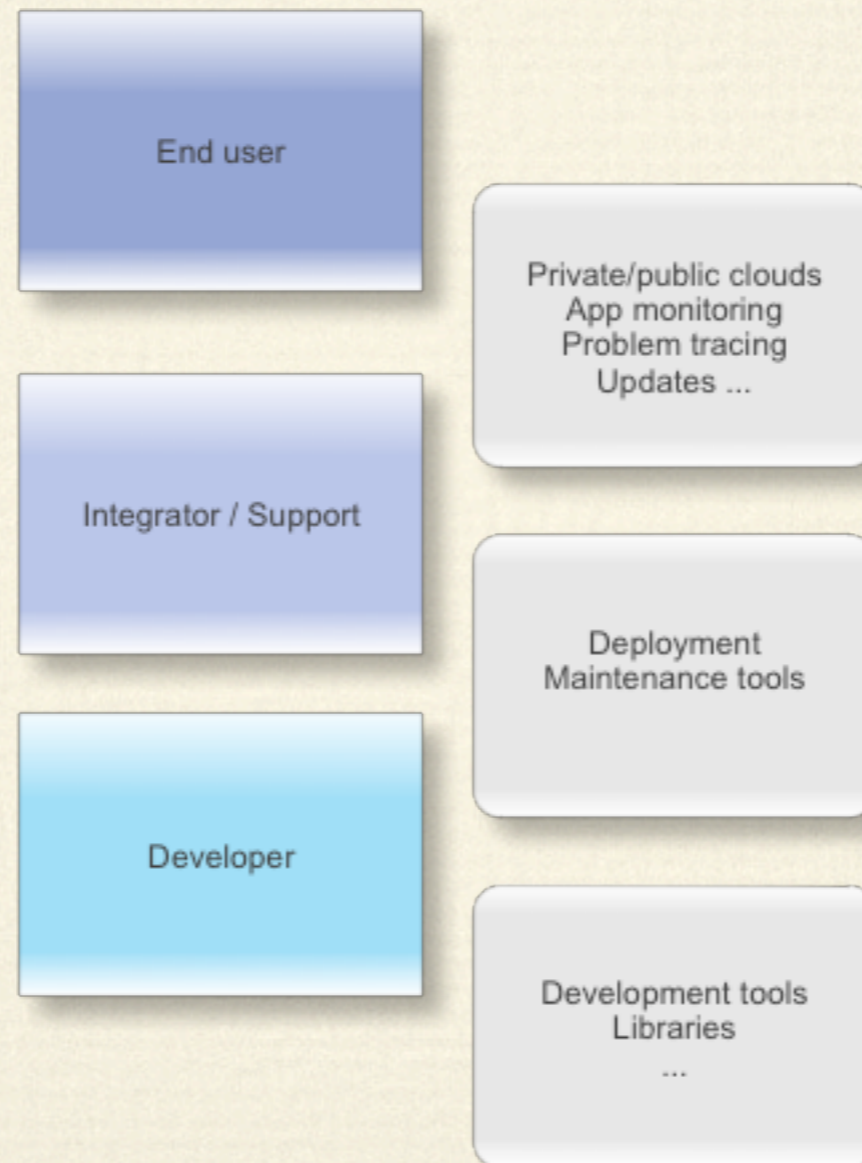
# Our goals with ErlangPro

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- ❖ Simplify all aspects of apps' lifecycle
- ❖ Define and automate trivial actions where it's possible
- ❖ Significantly reduce deployment and maintenance costs
- ❖ Improve functionality without changing Erlang/OTP itself
- ❖ Enable wider usage of Erlang in clouds



# Our goals with ErlangPro

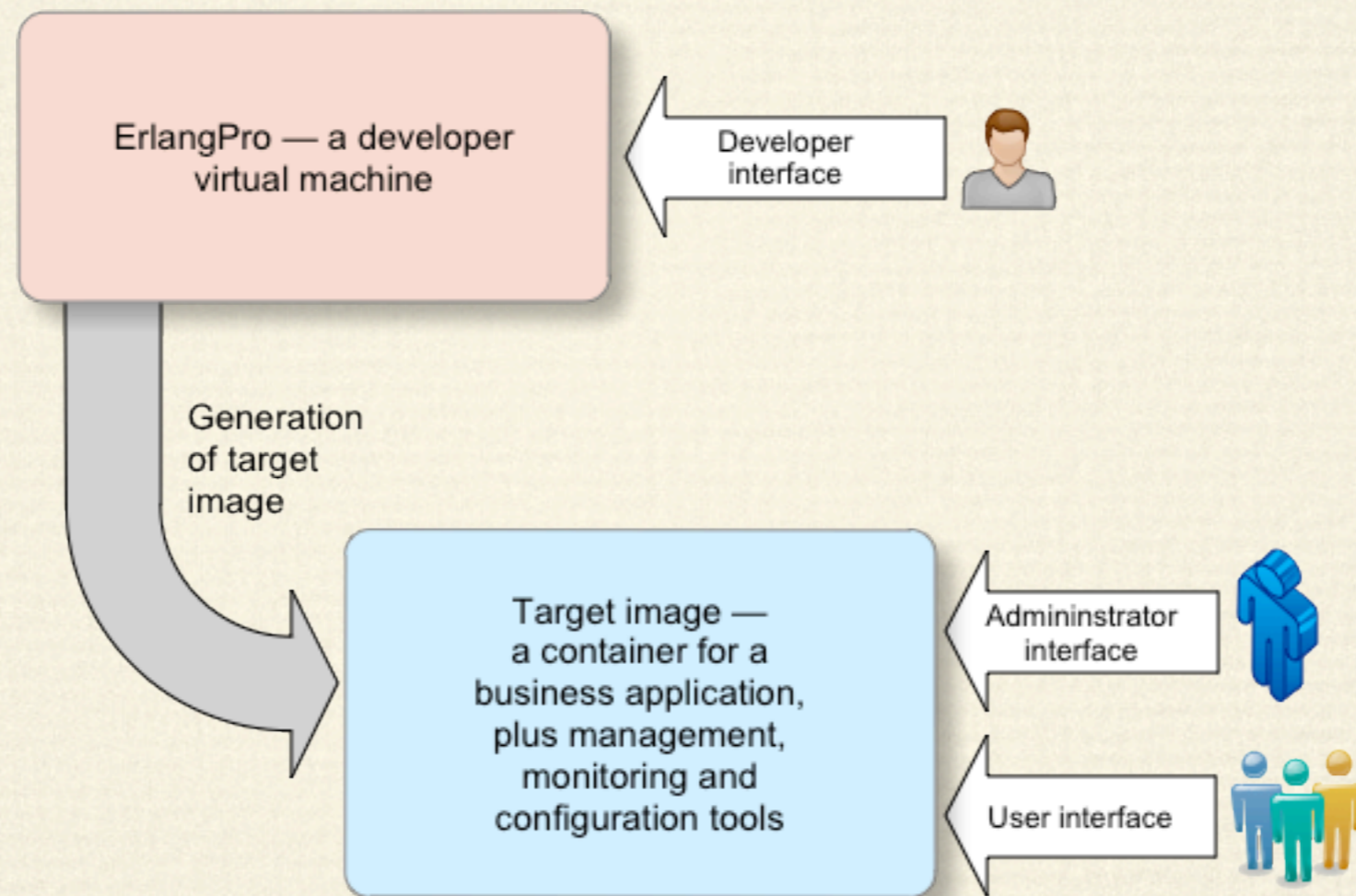


# Our goals with ErlangPro

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# Our solution



# Developer's perspective

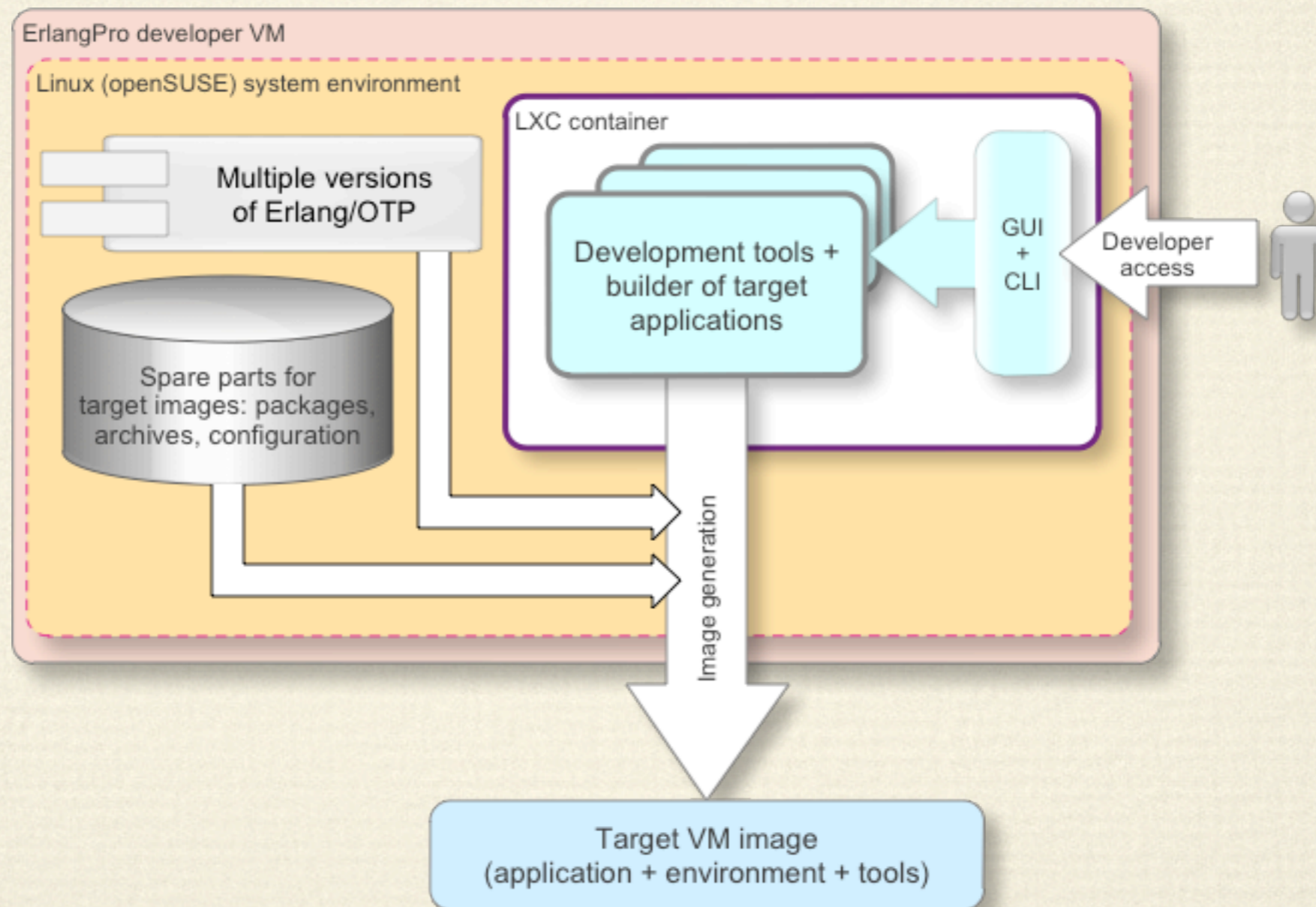
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- ❖ Generator of virtual appliances
- ❖ Repositories with Massive's part: Erlang/OTP(s), MMCS, etc
- ❖ Collection of spare parts for image generation
- ❖ Support major hypervisors and physical nodes



# Developer's perspective





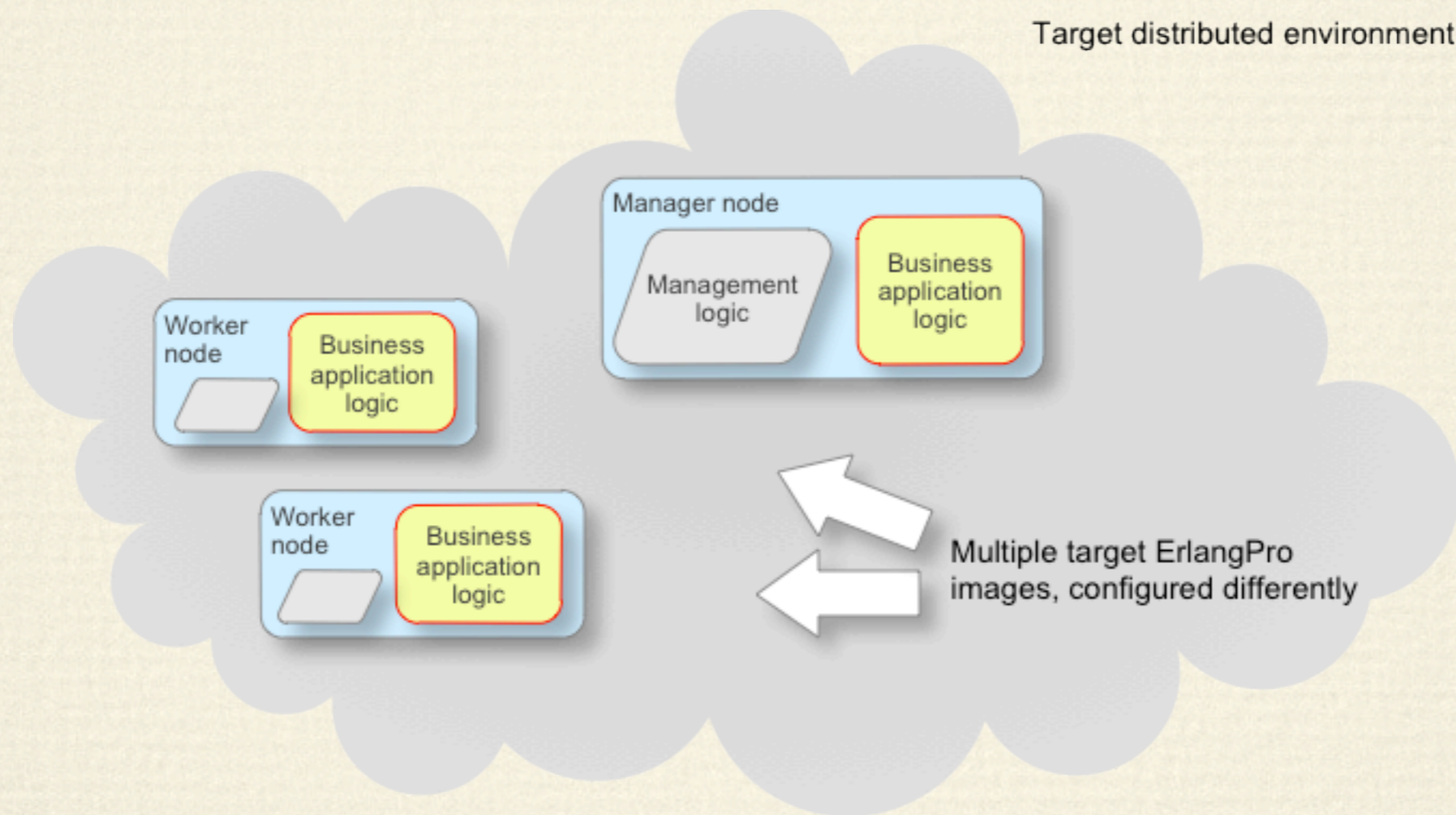
# Integrator's perspective

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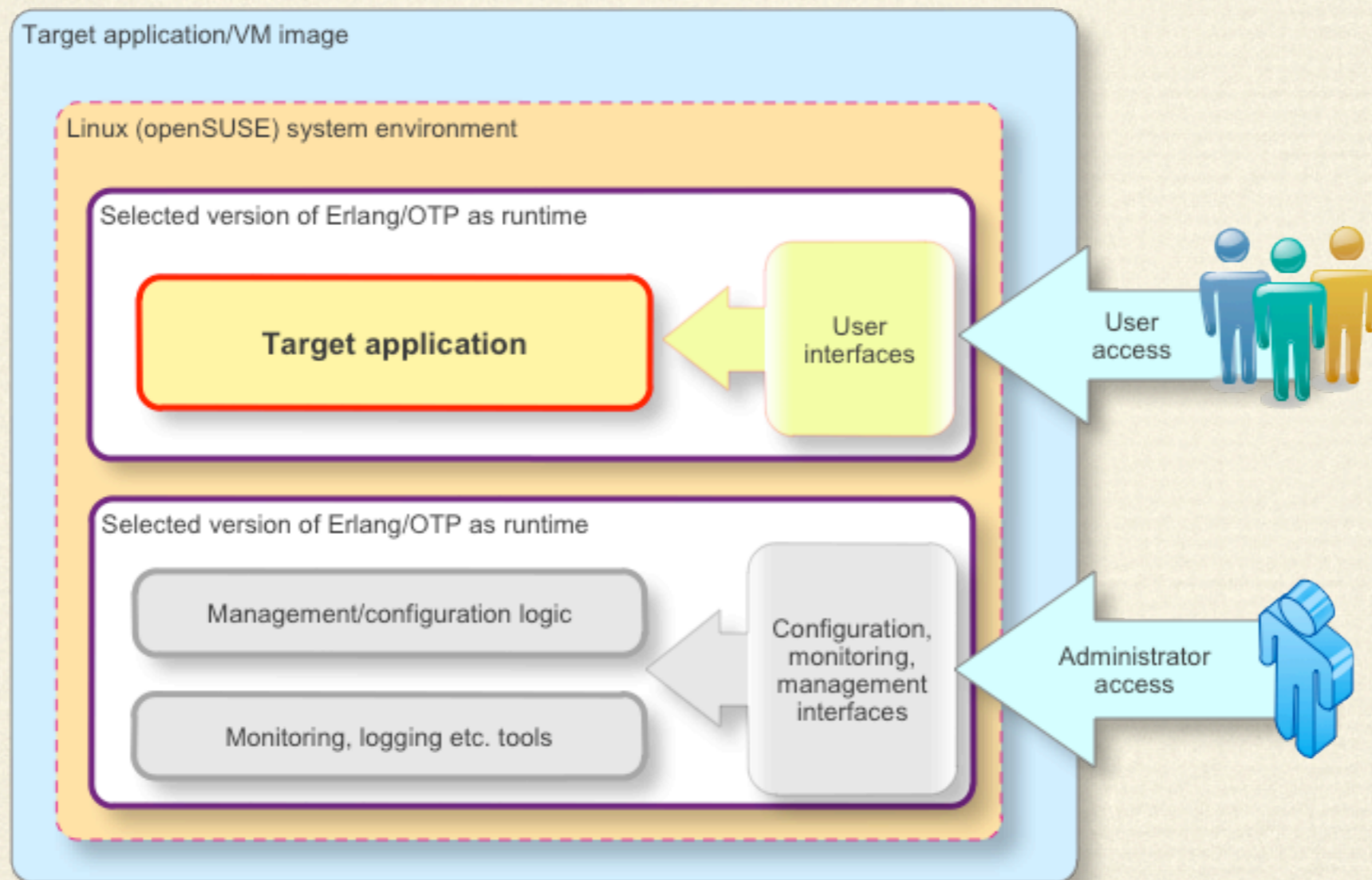
- ❖ Single-image deployment scheme
- ❖ Deployment to clouds or to physical clusters
- ❖ Automated start of distributed configurations
- ❖ Single management console (CLI and Web GUI)
- ❖ Single source of configuration for all components (dconf)
- ❖ Monitoring of everything, filters and automated actions



# Integrator's perspective



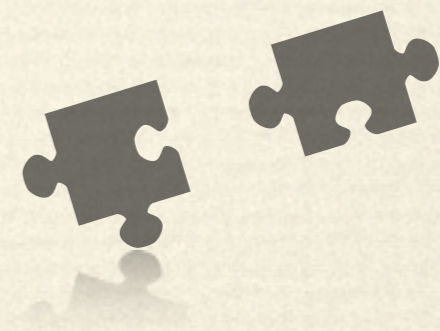
# Guts



# Guts

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- ❖ Basic Linux (currently OpenSUSE-based)
- ❖ Fully isolated environments:
  - ❖ Erlang app(s)
  - ❖ Management logic
- ❖ Connected repos



# Maintenance

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- ❖ Monitoring of all everything
- ❖ Customised alerts
- ❖ Automated actions
- ❖ Embedded logfile analysis tools
- ❖ Export monitoring data



# Maintenance: GUI example

10.13.0.5:8888/dynamic/html/nav/main?act=index

Query Filters [2012-03-27, 18:39:03, +0300] error: top: rpc call failed

Cluster info Navigation Image manager Testing New task Queue Configuration Logout [supervisor]

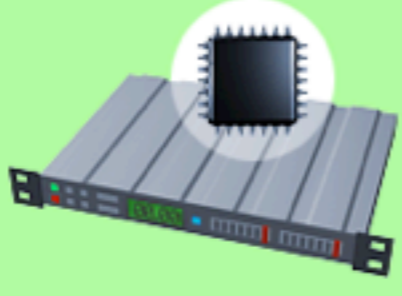
location Room 2

Object	Description
epro-worker-2	Worker node #2
ep-head	Head node

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**Information**

Object: Room 2 -> Node 2  
Hostname: epro-worker-2  
IP: 10.9.0.2  
Description: Worker node #2  
Object ignored: false



2.00.00.02.Node (200000210)

Search

**Node tests**

**Interfaces**

Parameter	Value
<b>eth0</b>	
Gateway	10.9.0.254
IP	10.9.0.2
Mask	255.255.255.0
Role	management

**Platform info**

**Images**

**Configuration**

Parameter name	Standard
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Top

No information to display



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# Usecases

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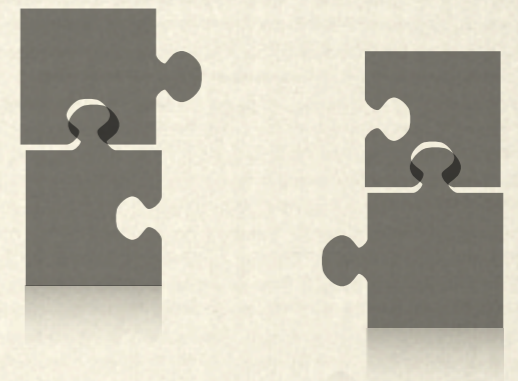
- ❖ Simple deployment of distributed applications:
  - ❖ ejabberd 
  - ❖ Riak
  - ❖ RabbitMQ 
- ❖ Or anything else (your app?)



# Current status

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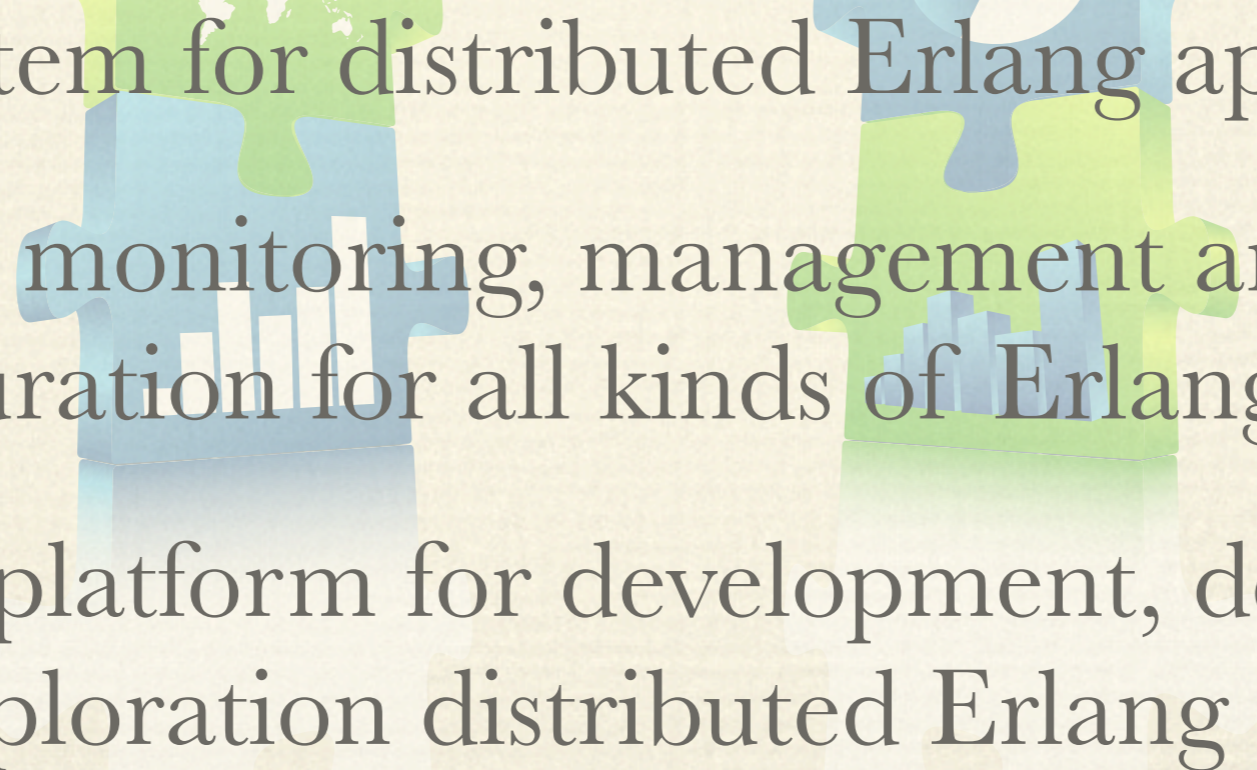
- ❖ Development started in December 2011
- ❖ Downscaling is in progress
- ❖ Main functionality is implemented
- ❖ Tailoring of CLI, GUI, APIs is being continued
- ❖ Developer VM had been used to produce production Target VMs
- ❖ There are a lot of plans to be voiced after official release





# Summary

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- ❖ Ecosystem for distributed Erlang applications
  - ❖ Proven monitoring, management and configuration for all kinds of Erlang software
  - ❖ Single platform for development, deployment and exploration distributed Erlang apps

