

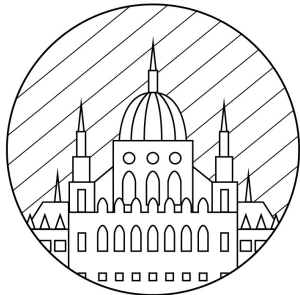
# Apache OFBiz Infra Task Automation For Deployment And Hosting



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# Introduction

- IT project highly difficult, moreover concerning ERP
- How to achieve goals
- Too big subject for a simple conference, but we will focus on technical aspects



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- 2) Specifications
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# Strategy and Objectives

## Strategy and Objectives



# Strategy and Objectives

- Making the project a success
  - Most Important : select a project method
    - Like Scrum, Kanban, Extrem or other
  - Transform needs in tasks and organize its following the chosen project method
  - Each project role have to be focus on their own domain (specification writing, dev, validation, sys admin)
- Giving visibility to managers



# Strategy and Objectives

- Secure production deployments
  - A little issue could have very costly consequences whatever the origin :
    - Development
    - System Administration
    - Data
- Who bear the responsibilities
- How the code is validated
- How to ensure what is deployed



# Strategy and Objectives

- Managing multi-project improvements
- Solve customers needs / making the project a success.
  - Identify what can be mutualisable :
    - Between our projects
    - To the community
- Ability to grow with others



# Strategy and Objectives

- Specific development capitalization
  - Apache OFBiz stable branches, bug fix only
  - Apache OFBiz Trunk, bug fix and new functionalities
  - Customer production only on stable branches !  
(Or not, but at your own risks)
- How to contribute to trunk considering previous rules ?





# Specifications

## Specifications



# Specifications

- Need tools and process to :
  - Stick with project management process
  - Ease developer work
  - Automate validation tests and deployment
  - Identification of development revision
  - Secure production delivery
  - Multi-project/customer/community code management
  - Managing community backport



# Specifications

- Our first idea :
  - Split code into versioning packages which are :
    - A developer task
    - A specific customer code
    - An Apache OFBiz potential identified contribution
    - An Apache OFBiz fonctionnality backport



# Specifications

- Community valuable identified by project/community manager, in separated packages
- Versioning offer stability to project and evolution
- A package can be easily shared



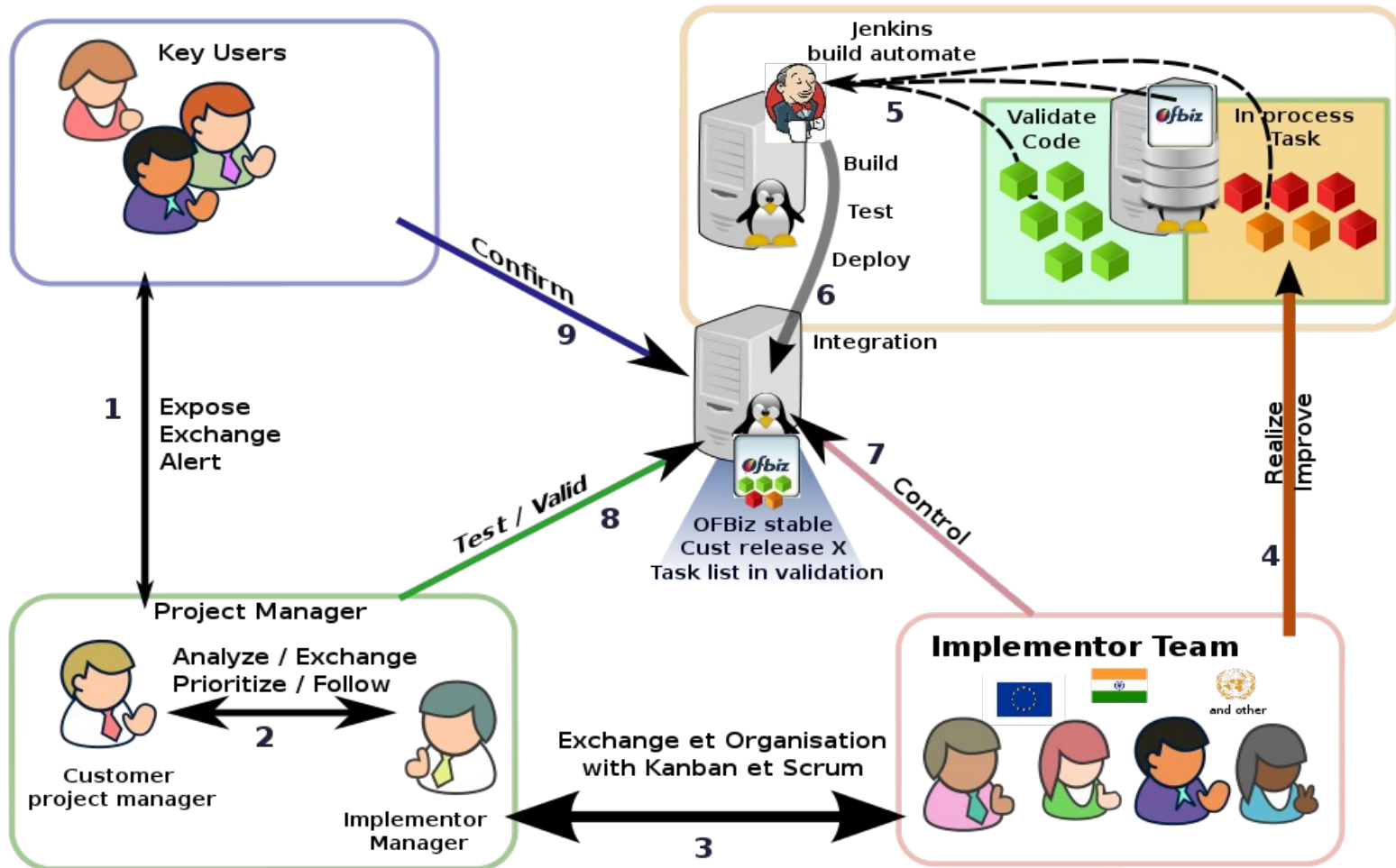
# How do we proceed ?

## How do we proceed ?



# How do we proceed ?

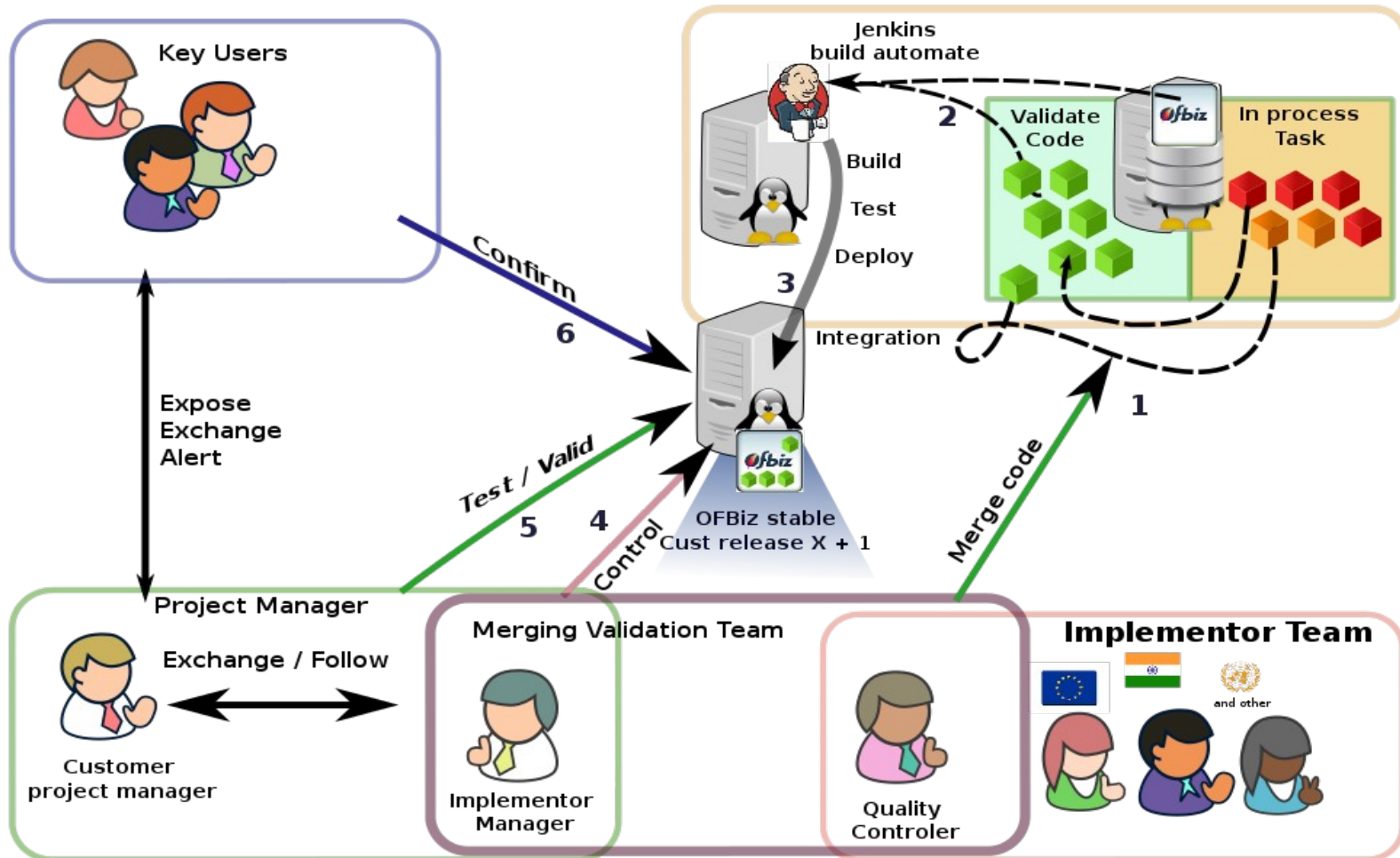
## Development process 1/2





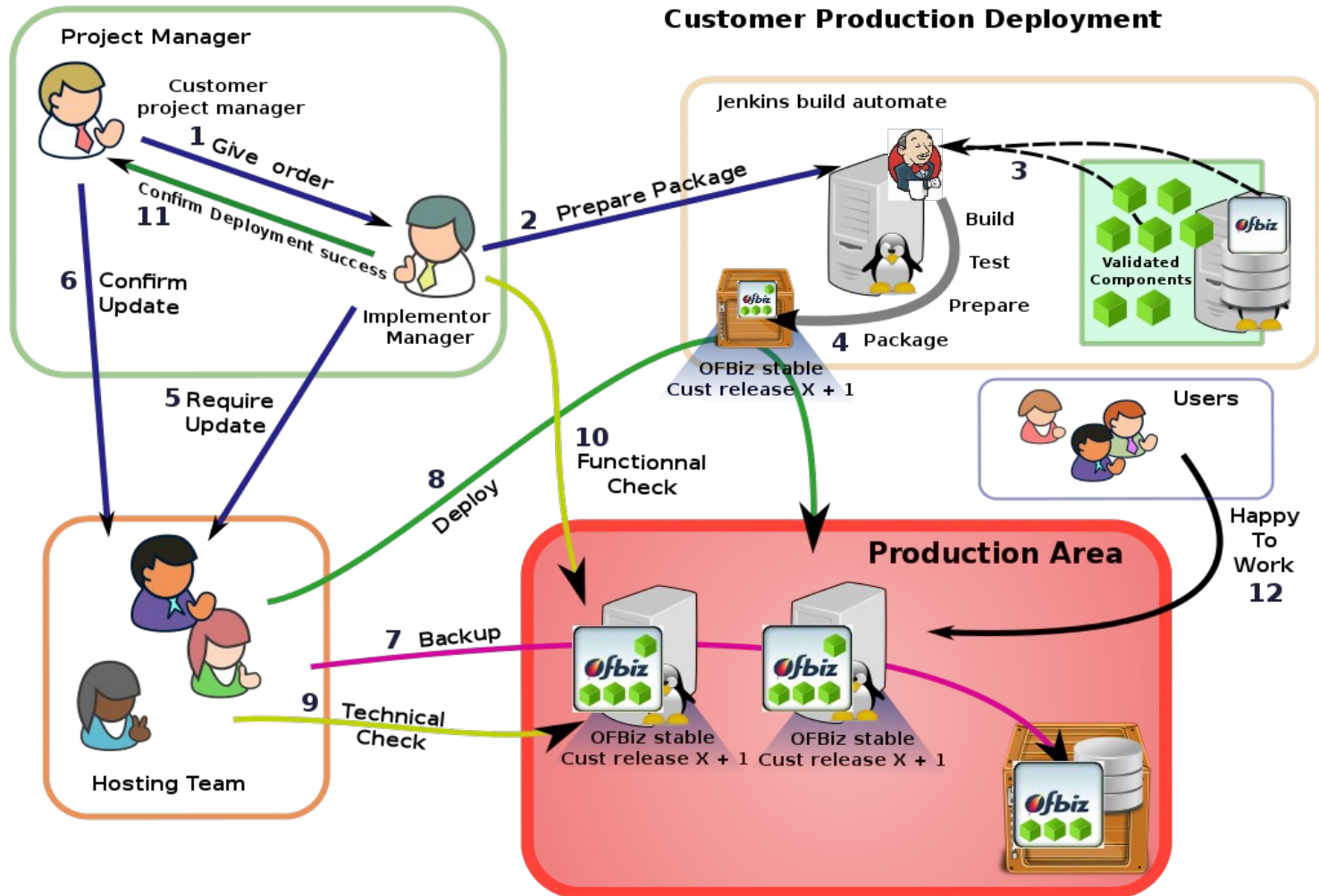
# How do we proceed ?

## Development process 2/2





# How do we proceed ?







# Tools

## Tools



# Tools

- Addonmanager
  - Build, download, manage easily packages
  - Managing dependencies between packages

```
<ivy-module version="2.0">
  <info module="sprint-v171114" organisation="fr.nereide" revision="0.1.11.
  <dependencies>
    <dependency name="naccounting-integ-connector-invoice" rev="late
    <dependency name="naccounting-integ-connector-order" rev="latest
    <dependency name="23151" rev="latest.integration" org="fr.nereide" tr
    <dependency name="24646" rev="latest.integration" org="fr.nereide" tr
    <dependency name="24690-ines-filles-et-SB" rev="latest.i
  </dependencies>
</ivy-module>
```

- Use it with SVN repository



# Tools

- A industrialization tool
- Jenkins, our faithful servant
  - To build our packages in the project
  - To control the build with compilation, tests...
  - To deploy to customer/integrator's platforms
  - To prepare production solution
  - To help developer for specific maintenance tasks (like update integration database from production)





# Tools – Jenkins build example

- Jenkins configured to offer following builds :
  - PRO\$ {projectId}-construction
  - PRO\$ {projectId}-deployment-integ
  - PRO\$ {projectId}-deployment-sandbox
  - PRO\$ {projectId}-packaging-production
  - PRO\$ {projectId}-dump-prod-to-sandbox



# Tools – Jenkins build example

- PRO\${projectId}-construction:
  - checkout weekly revision of svn OFBiz
  - Install project validated addons
  - Install given unvalidated devs addons in param
  - Compile and test
  - If build validated Jenkins automatically launch the following build...



# Tools – Jenkins build example

- PRO\${projectId}-deployment :
  - Tar last successful construction of the project
  - Scp to the integration VM
  - Untar, install environment addon and compile
  - Stop integration OFBiz, save actual revision of environment and switch to the new one
  - Launch the new OFBiz and check status
  - Idem for Sandbox and Production



# Tools – Jenkins build example

- PRO\${projectId}-dump-prod-to-sandbox :
  - Connect to prod environment and get the last db dump
  - Reset sandbox database with prod dump



# Tools

- A sharing tool dedicated to our packages
  - To ease sharing
  - To simplify specific package revision installation
  - To ease the job of industrialization tool into project building





# Difficulties

## Difficulties



# Difficulties

- Our found out difficulties and points to watch
  - Good Code splitting :
    - Prod delivery
    - Sharing between project, dependencies
    - What can profit to community
    - A lot of work of package merging and synchronization
    - In other words, manage the life !



# Difficulties

- Our found out difficulties and points to watch
  - Community vs Project speed/objectives
    - Project : effectiveness and date delivery
    - Community : Quality and apache validation, (quality delivery)
  - Result : hard to contribute and share into Apache OFBiz without a dedicated integrator person
  - A commit is a great success for the integrator team (quality, share, happiness)



# Improvements

## Improvements



# Improvements - Statement

- Addon manager tool is a satisfying solution, but :
  - Unix patch command dependent
  - Out of Apache
  - Miss to be known
- Addon repository serve its goal with addonmanager



# Improvements - Actions

- With OFBiz-france association
  - Addon manager is a Proof of concept
  - Launch a discussion about the conception of a new extension manager
  - The goal is to offer industrialization possibilities OOTB among others
  - Not so much reactions today
  - Purpose : give Apache OFBiz more flexibility for ERP project





# Questions !

- If you have any questions feel free to ask !
- No authorization to launch tomatoes, empty beer cans or anything that can hurt the spanish cow







And they lived happily  
ever after