开源商业解决方案odoo的实践之路













Collaboration







IT Operation

















Integrated SCM & Project Management















ERPNext









ERP







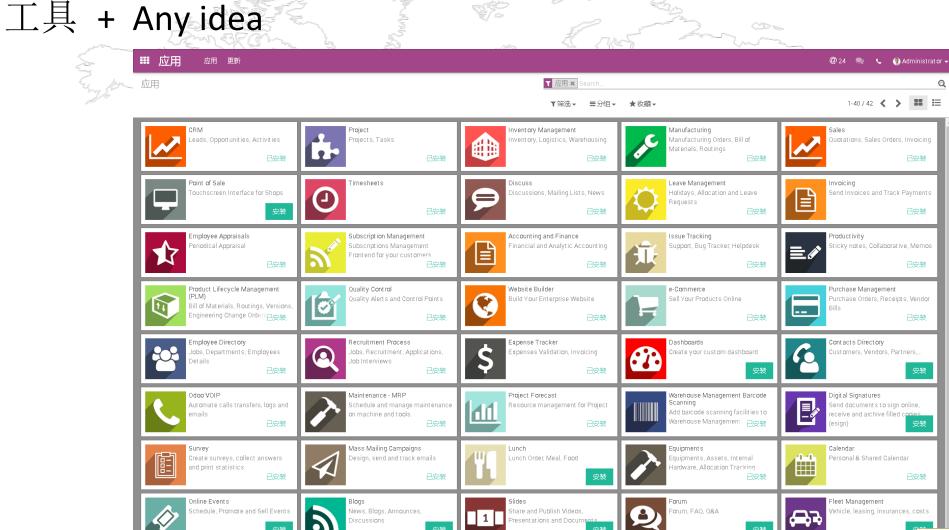
Choose the right things.





What is Odoo On Demand Open Object

CRM + ERP + MRP + POS + HRMS + 网站 + 营销 + 生产力



PyCon 2016 CILINA

Brief history: Odoo

A 1/2 1/2

2005: TinyERP 1.0-4.0-

2009: OpenERP 5.0-



2011: OpenERP 6.0

2012: OpenERP 6.1

2012: OpenERP 7.0

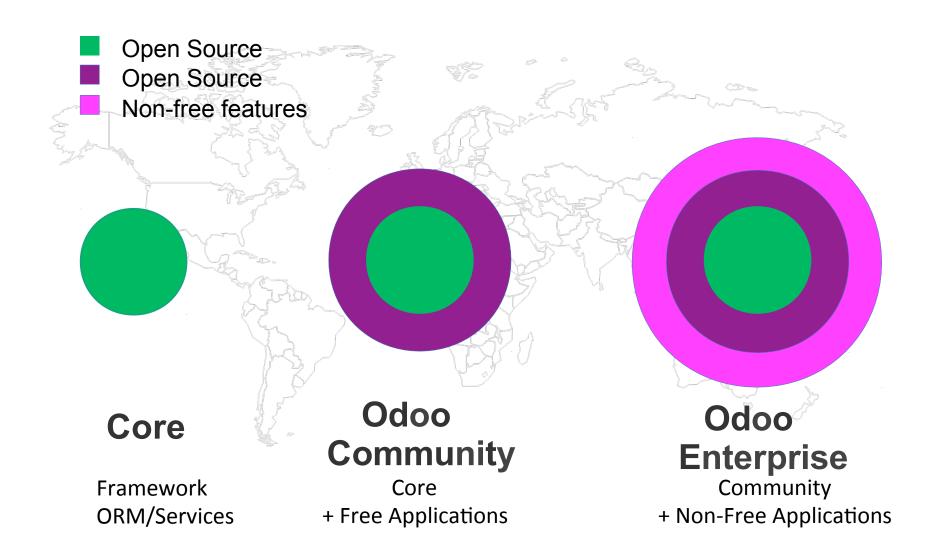
2014: Odoo 8.0

2015: Odoo 9.0

2016: Odoo 10.0-

Odoo Edition





How to use Odoo



业务解决方案,大量的Odoo Apps

- Odoo community 200+
- Odoo enterprise 100+
- Odoo社区 10,000+

开发平台,强大的Framework

- LGPL授权
- 快速开发





Front-end pages

Back-end JS client

User Interface

HTTP Routing

Controllers (Front-end, Back-end)

Business Logic (Apps)

Messaging, Notifications (mail)

ORM

Controllers

Models

PostgreSQL Store

Persistence

学习



- 了解, 学习
- 部署并尝试
 - 1. 绿色版/VM镜像
 - 2. 源码安装
 - 3. 安装包
 - 4. 在线saas

Ubuntu better than windows Python 2.7, not support Py3 PostgreSQL, no other

Ref:

官网 http://www.odoo.com

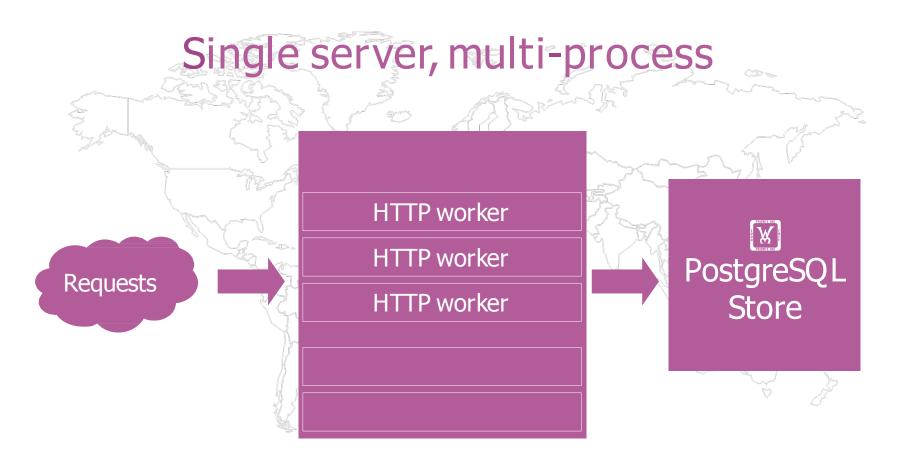
代码库 http://github.com/odoo/odoo

用户文档 https://www.odoo.com/documentation/user

技术文档 https://www.odoo.com/documentation

部署架构

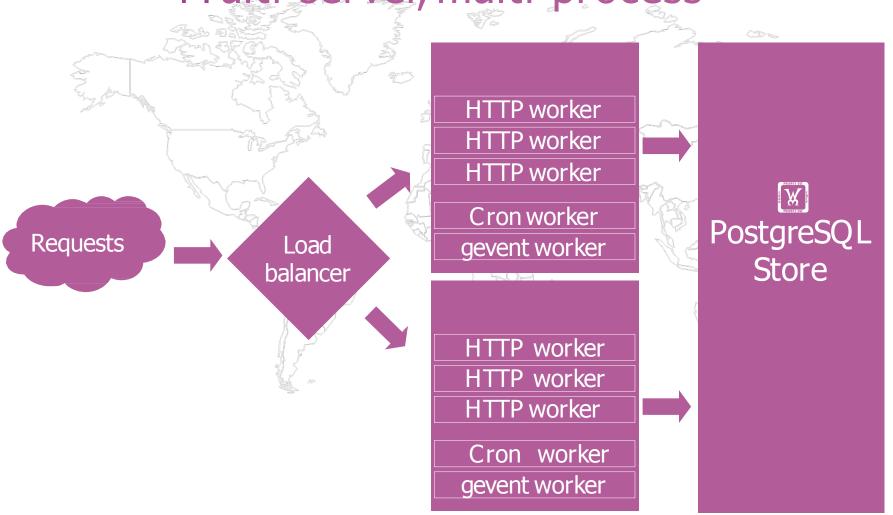




部署架构



Multi-server, multi-process



实施过程

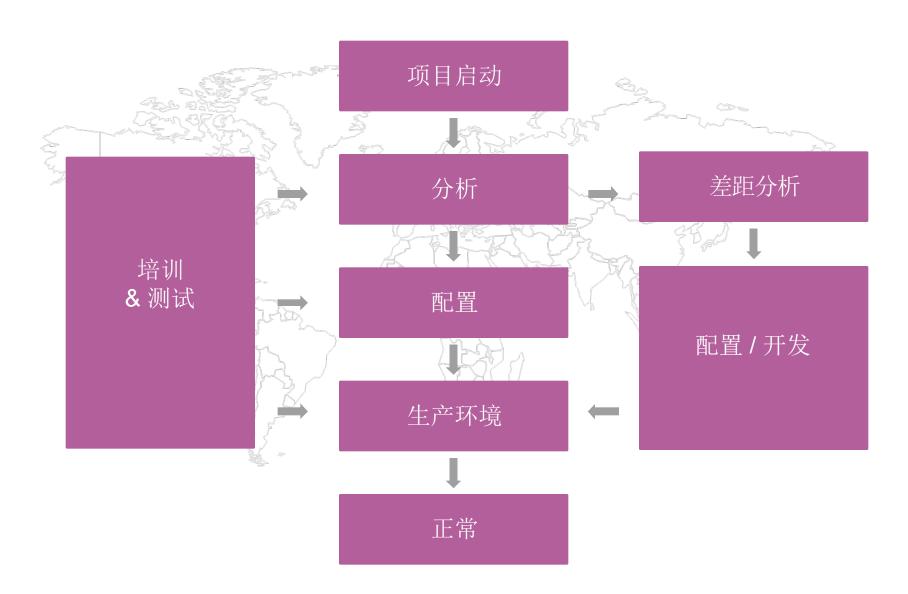


- 需求收集
- 需求分析, 配置开发
- 撰写文档,培训用户
- 上线
- 支持

Velocity速度 Volume体量 Value 价值

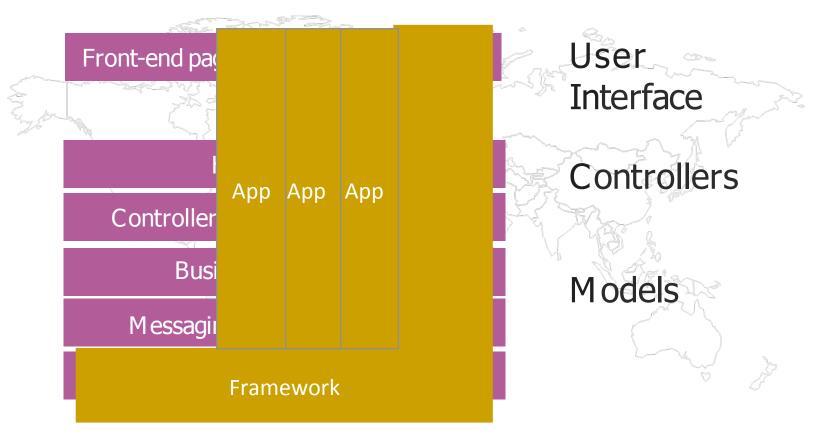
实施过程







Odoo Architecture



PostgreSQL Store

Persistence



- . Three-tier client/server/database
- . Web client in Javascript
- . Server and backend modules in Python
 - . MVC framework
- Odoo Addons =
- Python Module + odoo application assets.

Odoo App Addons Odoo module



odoo application assets. = Manifest file + py file + data file + web assets.

```
openerp .py
     -*- encoding: utf-8 -*-
     Part of Odoo. See LICENSE file for full copyright and licensing details.
          name': 'Website Builder',
          category': 'Website',
          sequence': 50,
          'summary': 'Build Your Enterprise Website',
'website': 'https://www.odoo.com/page/website-builder',
          'description':
          depends': ['web', 'web_editor', 'web_planner'],
          'installable': Trúe,
'data': [
               'data/website_data.xml',
'data/web_planner_data.xml',
'security/ir.model.access.csv',
'security/website_security.xml',
               'views/website_templates.xml',
'views/website_navbar_templates.xml',
'views/snippets.xml',
'views/website_views.xml',
'views/res_config_views.xml',
'views/ir_actions_views.xml',
               'wizard/base_language_install_views.xml',
                'data/website_demo.xml',
           qweb': ['static/src/xml/website.backend.xml'],
           application': True,
```



odoo application assets. = Manifest file + py file + data file + web assets.

```
class Website(models.Model):
        _name = "website"  # Avoid website.website convention for conciseness (for new
api). Got a special authorization from xmo and rco
        _description = "Website"
        def _active_languages(self):
    return self.env['res.lang'].search([]).ids
        def _default_language(self):
                lang_code = self.env['ir.values'].get_default('res.partner', 'lang')
def_lang = self.env['res.lang'].search([('code', '=', lang_code)], limit=1)
return def_lang.id if def_lang else self._active_languages()[0]
        name = fields.Char('Website Name')
domain = fields.Char('Website Domain')
company_id = fields.Many2one('res.company', string="Company", default=lambda se
lf: self.env.ref('base.main_company').id)
language_ids = fields.Many2many('res.lang', 'website_lang_rel', 'website_id', '
lang_id', 'Languages', default=_active_languages)
default_lang_id = fields.Many2one('res.lang', string="Default Language", default
t=_default_langúage)
        default_lang_code = fields.Char(related='default_lang_id.code', string="Default
  language code", store=True)
       social_twitter = fields.Char('Twitter Account')
social_facebook = fields.Char('Facebook Account')
social_github = fields.Char('GitHub Account')
social_linkedin = fields.Char('LinkedIn Account')
social_youtube = fields.Char('Youtube Account')
social_googleplus = fields.Char('Google+ Account')
google_analytics_key = fields.Char('Google Analytics Key')
```

A model and its fields are defined in a Python class:

数据结构

+ 业务逻辑



odoo application assets. = Manifest file + py file + data file + web assets. XML or CSV

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<odoo>
     <data noupdate="1">
          0"/>
          </record>
          </record>
          <field name="sequence" type="int">10</field>
<field name="website_id" ref="default_website"/>
           </record>
          <record id="menu_contactus" model="website.menu">
               </record>
```



odoo application assets. = Manifest file + py file + data file + web assets.

Javascripts + CSSs

```
<?xml version="1.0" encoding="utf-8"?>
<odoo>
<!-- Assets -->
<template id="assets_backend" inherit_id="web.assets_backend" name="Website Backend</p>
 Assets">
    is"></script>
         <script type="text/javascript" src="/website/static/src/js/website.tour.rte</pre>
         <script type="text/javascript" src="/website/static/src/js/website.backendD</pre>
ashboard.js"></script>
         k rel="stylesheet" href="/website/static/src/less/website.backendDashbo
ard.less"/>
</template:</pre>
                                     200
                                            document
                                                                       Other
                                                                                  1.6 KB
                                                                                         42 ms
 web.assets_backend.0.css
                                     200
                                            stylesheet
                                                                       web:37
                                                                                  255 KB
                                                                                         62 ms
 web.assets_backend.1.css
                                            stylesheet
                                     200
                                                                       web:38
                                                                                  188 KB
                                                                                         67 ms
 web.assets_common.0.css
                                     200
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                                                                       web:35
                                                                                  135 KB
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 web editor.summernote.0.css
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                                                                                  11.6 ...
                                     200
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                                                                                         76 ms
                                                                                  50.2 ...
 web_editor.assets_editor.0.css
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                                            stylesheet
                                                                                         93 ms
                                                                       web:42
                                                                                         149...
 web.assets_common.js
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                                            script
                                                                       web:44
 web.assets_backend.js
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                                     200
                                            script
                                                                       web:46
                                                                                  1.8 MB
                                                                                  185 KB
 web_editor.summernote.js
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                                            script
                                                                       web:55
                                                                                         149...
web_editor.assets_editor.js
                                     200
                                            script
                                                                       web:57
                                                                                  143 KB
                                                                                         201...
```

操作硬件





操作硬件



Pos box 运行 最小化的 odoo 实例

/hw_proxy/hello 提供web service

扫描、称重

- Posbox 轮询条码枪
- Pos Apps 使用ajax 轮询posbox

打印

- Pos App 通过web service 向 posbox 发送指令
- ▶ Posbox驱动 硬件



启示



异构

松耦合

模块化

敏捷

Python 动态语言、灵活性

Open source = Free!= 免费



