

# Itop 从系统环境到应用安装全过程

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## 一、 环境安装配置

原本计划采用 centos+nginx+php+mysql，但在环境 OK 时，安装不成功 itop，感觉是在 itop 安装进读库有问题，但写了一个简单的读库 php 能得到数据库里的内容，但就是 itop 安装不上，还没找到原因。换成 centos+apache+php+mysql 的环境就没问题(简单记录一下，以备忘记)。

### 1、系统

基本的 CentOS5.8 64bit 系统，加装包

```
yum -y install gcc gcc-c++ autoconf.x86_64 libjpeg-devel.x86_64  
libpng-devel.x86_64 freetype-devel.x86_64 libxml2-devel.x86_64  
zlib-devel.x86_64 glibc-devel.x86_64 glib2-devel.x86_64  
bzip2-devel.x86_64 ncurses-devel.x86_64 curl-devel.x86_64  
e2fsprogs-devel.x86_64 krb5-devel.x86_64 libidn-devel.x86_64  
openssl-devel.x86_64 openldap-devel.x86_64 freetds.x86_64  
freetds-devel.x86_64 unixODBC.x86_64 unixODBC-devel.x86_64 libxslt  
libtool-ltdl-devel.x86_64 compat-libcom_err libtidy-devel.x86_64  
libmcrypt-devel.x86_64 mhash-devel.x86_64 ImageMagick-devel.x86_64  
ImageMagick.x86_64 libtool.x86_64 autoconf libiconv
```

### 2、Mysql(mysql5.5.30)

```
rpm -ivh MySQL-server-5.5.30-1.rhel5.x86_64.rpm
```

```
rpm -ivh MySQL-client-5.5.30-1.rhel5.x86_64.rpm
```

```
rpm -ivh MySQL-devel-5.5.30-1.rhel5.x86_64.rpm
```

```
rpm -ivh MySQL-shared-5.5.30-1.rhel5.x86_64.rpm
```

```
rpm -ivh MySQL-shared-compat-5.5.30-1.rhel5.x86_64.rpm
```

```
service mysql start
```

```
mysqladmin -u root password '密码' //给 root 设置密码，缺省为空
```

```
mysql -p
```

```
GRANT all privileges on *.* to root@'IP' IDENTIFIED BY '密码'; //因为这里是测试，
```

没做严格安全限制，IP 处替换成要连接该数据库的客户端 IP。

### 3、apache(httpd-2.2.26)

A、apr(apr-1.5.0.tar.gz) //apr 的两个包是在编译 apache 时提示需要的。

```
tar -zxvf apr-1.5.0.tar.gz
```

```
mkdir /usr/local/apr-httpd
```

```
cd apr-1.5.0
```

```
./configure --prefix=/usr/local/apr-httpd/
```

```
make
```

```
make install
```

B、apr-util(apr-util-1.5.3)

```
tar -zxvf apr-util-1.5.3.tar.gz
```

```
mkdir /usr/local/apr-util-httpd
```

```
cd apr-util-1.5.3
```

```
./configure --prefix=/usr/local/apr-util-httpd/
```

```
--with-apr=/usr/local/apr-httpd/
```

```
make
```

```
make install
```

### C、apache(httpd-2.2.26)

```
tar -zxvf httpd-2.2.26.tar.gz
```

```
cd httpd-2.2.26
```

```
mkdir /usr/local/apache2
```

```
./configure --prefix=/usr/local/apache2
```

```
--with-apr=/usr/local/apr-httpd/
```

```
--with-apr-util=/usr/local/apr-util-httpd/ --enable-so
```

```
--enable-mods-shared=all --with-mpm=worker
```

```
make
```

```
make install
```

```
/usr/local/apache/bin/apachectl start
```

浏览器里输入 <http://ip/>

测试页 : It works

OK!!

启动配置文件(/etc/init.d/httpd) , 网上一堆 , 也可自己找。

```
#!/bin/bash
#
# Startup script for the Apache Web Server
#
# chkconfig: - 85 15
# description: Apache is a World Wide Web server.  It is used to serve \
#              HTML files and CGI.
# processname: httpd
# pidfile: /usr/local/apache2/logs/httpd.pid
# config: /usr/local/apache2/conf/httpd.conf

# Source function library.
. /etc/rc.d/init.d/functions

if [ -f /etc/sysconfig/httpd ]; then
    . /etc/sysconfig/httpd
fi

# This will prevent initlog from swallowing up a pass-phrase prompt if
# mod_ssl needs a pass-phrase from the user.
INITLOG_ARGS=""

# Path to the apachectl script, server binary, and short-form for messages.
apachectl=/usr/local/apache2/bin/apachectl
httpd=/usr/local/apache2/bin/httpd
pid=/usr/local/apache2/logs/httpd.pid
prog=httpd
RETVAL=0

# The semantics of these two functions differ from the way apachectl does
# things -- attempting to start while running is a failure, and shutdown
# when not running is also a failure.  So we just do it the way init scripts
# are expected to behave here.
start() {
    echo -n "Starting $prog: "
    daemon $httpd $OPTIONS
    RETVAL=$?
    echo
    [ $RETVAL = 0 ] && touch /var/lock/subsys/httpd
    return $RETVAL
}
```

```

stop() {
    echo -n $"Stopping $prog: "
    killproc $httpd
    RETVAL=$?
    echo
    [ $RETVAL = 0 ] && rm -f /var/lock/subsys/httpd $pid
}

reload() {
    echo -n $"Reloading $prog: "
    killproc $httpd -HUP
    RETVAL=$?
    echo
}

```

# See how we were called.

```

case "$1" in
    start)
        start
        ;;
    stop)
        stop
        ;;
    status)
        status $httpd
        RETVAL=$?
        ;;
    restart)
        stop
        start
        ;;
    condrestart)
        if [ -f $pid ] ; then
            stop
            start
        fi
        ;;
    reload)
        reload
        ;;
    graceful|help|configtest|fullstatus)
        $apachectl $@
        RETVAL=$?
        ;;
    *)

```

```

        echo $"Usage: $prog {start|stop|restart|condrestart|reload|status}
        echo $"|fullstatus|graceful|help|configtest}"
        exit 1
    esac

    exit $RETVAL

```

```
chmod 755 /etc/init.d/httpd
```

```
chkconfig --add httpd
```

```
chkconfig --level 345 httpd on
```

#### 4、**php**(php-5.2.17.tar.gz , 5.3 以上没试过)

这个环境，在安装 php 之前还有两步需要做

```
cp -frp /usr/lib64/libldap* /usr/lib/
```

```
ln -s /usr/lib64/mysql /usr/lib/
```

```
tar -zxvf php-5.2.17.tar.gz
```

```
cd php-5.2.17
```

```
./configure --prefix=/usr --with-config-file-scan-dir=/etc/php.d/
```

```
--disable-debug --enable-dba=shared --with-freetype-dir
```

```
--with-png-dir --with-jpeg-dir --with-ldap --with-ldap-sasl --with-curl
```

```
--with-libxml-dir --with-mysql
```

```
--with-pdo-mysql=/usr/bin/mysql_config --enable-sockets
```

```
--enable-mbstring --enable-ftp --with-iconv --with-mcrypt
```

```
--with-mhash --enable-pdo --enable-fastcgi --disable-rpath
```

```
--enable-safe-mode      --enable-bcmath      --enable-shmop
--enable-sysvshm        --enable-inline-optimization
--enable-force-cgi-redirect  --enable-sqlite-utf8  --enable-mbregex
--enable-soap           --with-openssl       --with-zlib
--with-apxs2=/usr/local/apache2/bin/apxs
```

```
cp php.ini-recommended /usr/lib/php.ini
```

```
cd ./ext/mysqli
```

```
phpize
```

```
./configure
```

```
make
```

```
make install
```

```
cp /usr/lib/php/extensions/no-debug-zts-20060613/mysqli.so
```

```
/usr/lib/php/extensions/
```

修改 apache 配置文件(/usr/local/apache2/conf/httpd.conf)

增加缺省文件

```
<IfModule dir_module>
    DirectoryIndex index.html index.php
</IfModule>
```

修改用户

```
User apache
Group apache
```

增加 php 支持()

```
LoadModule php5_module          modules/libphp5.so
AddType application/x-httpd-php .php .phtml
AddType application/x-httpd-php-source .phps
```

修改 php.ini

```
extension_dir = "/usr/lib/php/extensions/"
```

```
extension=mysqli.so    //增加 mysql 支持
```

service httpd start

如无异常，可以测试了。

## 5、测试

现在配置都已经结束了。

在 apache 的根目录下 vim phpinfo.php

```
<?php phpinfo();?>
```

现在浏览器里可以检查了

<http://IP/phpinfo.php>

这里不详述了。

## 二、 Itop 安装

把 iTop-2.0.2-1476.zip 解压到 apache 的根目录下 ,在浏览器里输入 <http://IP/web> ,

会出现如下两图 ( 一张图截不下 )



**iTop****Welcome to iTop version 2.0.2**

## iTop Installation Wizard

Prerequisites validation:  4 Error(s), 1 Warning(s).



iTop needs the directory **'/var/www/html/itop/log'** to be writable. The directory **'/var/www/html/itop/log'** does not exist and **'/var/www/html/itop/'** is not writable, the application cannot create the directory 'log' inside it.



iTop needs the directory **'/var/www/html/itop/env-production'** to be writable. The directory **'/var/www/html/itop/env-production'** does not exist and **'/var/www/html/itop/'** is not writable, the application cannot create the directory 'env-production' inside it.



iTop needs the directory **'/var/www/html/itop/conf'** to be writable. The directory **'/var/www/html/itop/conf'** does not exist and **'/var/www/html/itop/'** is not writable, the application cannot create the directory 'conf' inside it.

Sorry, the installation cannot continue. Please fix the errors and reload this page to launch the installation again.

**iTop****Welcome to iTop version 2.0.2**

## iTop Installation Wizard

Prerequisites validation:  4 Error(s), 1 Warning(s).



iTop needs the directory **'/var/www/html/itop/conf'** to be writable. The directory **'/var/www/html/itop/conf'** does not exist and **'/var/www/html/itop/'** is not writable, the application cannot create the directory 'conf' inside it.



iTop needs the directory **'/var/www/html/itop/data'** to be writable. The directory **'/var/www/html/itop/data'** does not exist and **'/var/www/html/itop/'** is not writable, the application cannot create the directory 'data' inside it.



Empty path for session.save\_path. Make sure that PHP can actually save session variables. (Refer to the PHP documentation: <http://php.net/manual/en/session.configuration.php#ini.session.save-path>)

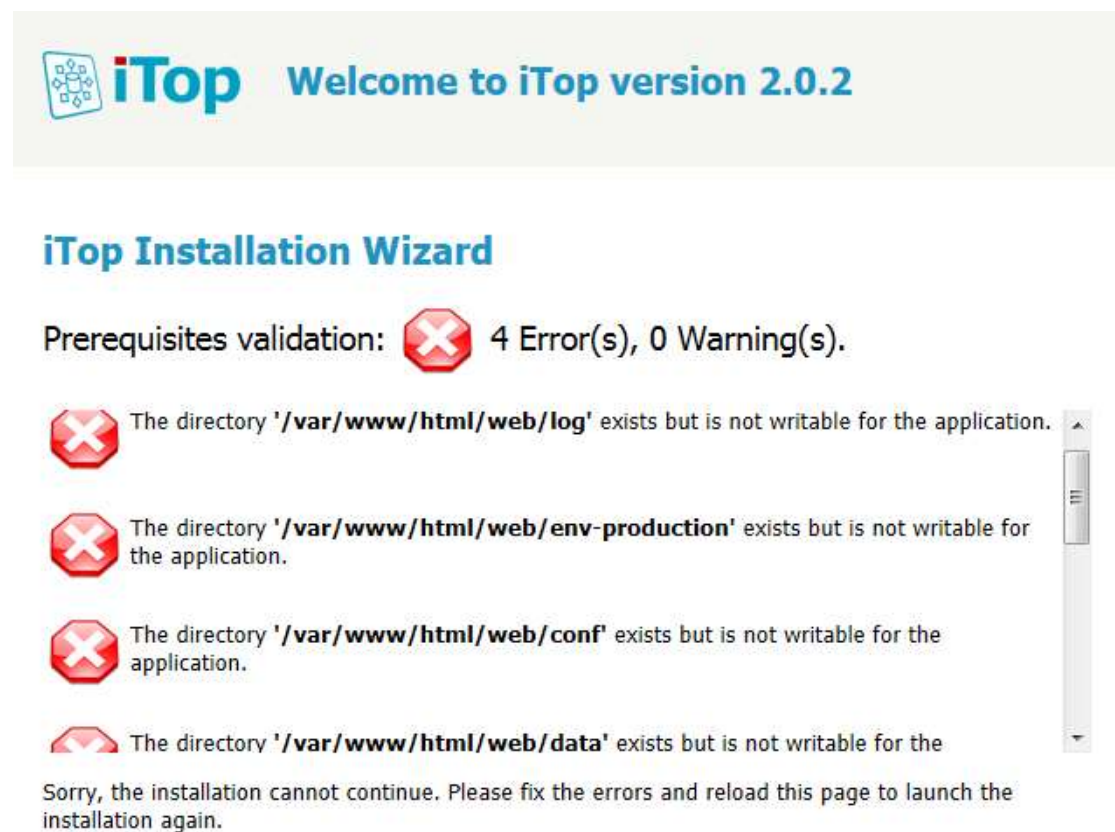
Sorry, the installation cannot continue. Please fix the errors and reload this page to launch the installation again.

在 itop 当前目录下:

```
mkdir conf log data env-production
```

修改 /usr/lib/php.ini 里的 ;session.save\_path = "/tmp" , 去掉前面的注释分号。

重启 apache 再刷新网页。如下图。



原因是新加的四个目录没有写权限


```
chown apache:apache conf/ log/ data/ env-production/
```

```
chmod 775 conf/ log/ data/ env-production/
```

刷新后, 提示环境 OK 了哎!

**iTop****Welcome to iTop version 2.0.2**

## iTop Installation Wizard

Prerequisites validation:  Ok.

[Show details](#)[Continue >>](#)

下一步

**iTop****Install or Upgrade choice**

What do you want to do?

- ☒ Install a new iTop
- ☐ Upgrade an existing iTop instance

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这里当然是全新安装，下一步

## Licenses agreements for the components of iTop

### Components of iTop

- **iTop**, © 2010-2013 Combodo SARL is licensed under the **AGPL v3 license**. ([Details](#))
- **jQuery, jQuery UI**, © the jQuery Foundation is licensed under the **MIT license**. ([Details](#))
- **The jQuery tooltip plugin**, © Craig Thompson is licensed under the **MIT license**. ([Details](#))
- **Swift Mailer**, © Chris Corbyn is licensed under the **LGPL v3 license**. ([Details](#))

☒ I accept the terms of the licenses of the 4 components mentioned above.


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接受条款（不接受不让过，多此一步），下一步(两种情况)

这里要注意了。如果出现的是图一，那么恭喜你。填上所需要项后继续。如果出现的是图二，基本可以肯定，安装是会失败的。我用 nginx 时就一直下出现的是图二（两个图区别，大家仔细看呀。一是能显示缺省的 test 库名，另外一个就没有。）


图一


**iTop Database Configuration**

Configuration of the database connection:

**Database Server Connection**


Server Name:  E.g. "localhost", "dbserver.mycompany.com" or "192.142.10.23"  
 Login:  The account must have the following privileges on the database:  
 Password:  SELECT, INSERT, UPDATE, DELETE, DROP, CREATE, ALTER, CREATE VIEW, SUPER, TRIGGER

 **Warning:** MySQL server's max\_allowed\_packet (1048576) is not big enough. Please, consider setting it to at least 2097652.

**Database**

☐ Create a new database:   
☒ Use the existing database:   
 Use a prefix for the tables:

图二


**iTop Database Configuration**

Configuration of the database connection:


**Database Server Connection**

Server Name:  E.g. "localhost", "dbserver.mycompany.com" or "192.142.10.23"  
 Login:  The account must have the following privileges on the database:  
 Password:  SELECT, INSERT, UPDATE, DELETE, DROP, CREATE, ALTER, CREATE VIEW, SUPER, TRIGGER

**Database**

☐ Create a new database:   
☒ Use the existing database:   
 Use a prefix for the tables:

接下来

 **iTop** Administrator Account

### Definition of the Administrator Account

**Administrator Account**


Login:

Password:

Confirm password:

Language:

填上初始 admin 帐号的密码，继续：

 **iTop** Miscellaneous Parameters

### Additional parameters

**Default Language**

Default Language:

**Application URL**

URL:

Change the value above if the end-users will be accessing the application by another path due to a specific configuration of the web server.

**Sample Data**

☐ I am installing a **demo or test** instance, populate the database with some demo data.

☒ I am installing a **production** instance, create an empty database to start from.

如果前面配置数据库处是 OK，则这里 URL 是全部的，否则会少前面的 IP 地址。继续：

**iTop**

## Configuration Management options



The options below allow you to configure the type of elements that are to be managed inside iTop.

- ☒ **Configuration Management Core**  
All the base objects that are mandatory in the iTop CMDB: Organizations, Locations, Teams, Persons, etc.
- ☒ **Data Center Devices**  
Manage Data Center devices such as Racks, Enclosures, PDUs, etc.
- ☒ **End-User Devices**  
Manage devices related to end-users: PCs, Phones, Tablets, etc.
- ☒ **Storage Devices**  
Manage storage devices such as NAS, SAN Switches, Tape Libraries and Tapes, etc.
- ☒ **Virtualization**  
Manage Hypervisors, Virtual Machines and Farms.

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Next &gt;&gt;

这里我全部选上了。用不用再说，呵呵。继续：

**iTop**

## Service Management options




Select the choice that best describes the relationships between the services and the IT infrastructure in your IT environment.


- ☒ **Service Management for Enterprises**  
Select this option if the IT delivers services based on a shared infrastructure. For example if different organizations within your company subscribe to services (like Mail and Print services) delivered by a single shared backend.
- ☐ **Service Management for Service Providers**  
Select this option if the IT manages the infrastructure of independent customers. This is the most flexible model, since the services can be delivered with a mix of shared and customer specific infrastructure devices.

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这里选了第一个，next：

 **iTop** Tickets Management options

 Select the type of tickets you want to use in order to respond to user requests and incidents.

☐ **Simple Ticket Management**  
Select this option to use one single type of tickets for all kind of requests.


☒ **ITIL Compliant Tickets Management**  
Select this option to have different types of ticket for managing user requests and incidents. Each type of ticket has a specific life cycle and specific fields


☒ **User Request Management**  
Manage User Request tickets in iTop

☒ **Incident Management**  
Manage Incidents tickets in iTop

☐ **No Tickets Management**  
Don't manage incidents or user requests in iTop

这里选了第二个，next：

 **iTop** Change Management options

 Select the type of tickets you want to use in order to manage changes to the IT infrastructure.


☐ **Simple Change Management**  
Select this option to use one type of ticket for all kind of changes.


☒ **ITIL Change Management**  
Select this option to use Normal/Routine/Emergency change tickets.

☐ **No Change Management**  
Don't manage changes in iTop



Next:

 **iTop** Additional ITIL tickets

 Pick from the list below the additional ITIL processes that are to be implemented in iTop.


☒ **Known Errors Management**  
Select this option to track "Known Errors" and FAQs in iTop.

☒ **Problem Management**  
Select this option track "Problems" in iTop.

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Next:

 **iTop** Ready to install

iTop version 2.0.2 is about to be installed into the **new** database **itop** on the server **192.168.85.233**.

**Installation Parameters**

☒ **Database Parameters**

☒ **Data Model Configuration**

☒ **Other Parameters**


☒ **Administrator Account**

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Install !

Next : install

期待的安装进度条出现了。这也是我用 nginx+php 一直没出现的😞

 **iTop** Ready to install

iTop version 2.0.2 is about to be installed into the **new** database **itop** on the server **192.168.85.233**.

Progress of the installation


Compiling the data model

20 %

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Install !

安装结束。(nginx 环境一直能有这界面，只是少了下面的 Enter iTop 按键)


 **iTop** Done


### Manual operations required

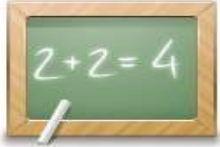
In order to complete the installation, the following manual operations are required:

- [Manual instructions for Tickets Management](#)

### Congratulations for installing iTop

  
**Register now !**

  
**Get Professional Support**

  
**Get Professional Training**

Enter iTop

## Enter iTop



安装到此结束。

欢迎拍砖！！