

<Revision 정보>

일자	VERSION	변경내역	작성자
2007.02.08	0.1	Bugzilla Source 설치하기	박준완

Bugzilla 운영보고서
Bugzilla 운영 사이트 구축 및 설치 가이드

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목 차

1. 문서 개요	4
가) 문서의 목적	15
나) 본 문서의 사용방법	15
다) 참고 사항	15
2. 설치 환경	5
3. Bugzilla 설치 전 준비사항	12
4. Bugzilla 설치	14
가) Perl Module 설치	15
나) localconfig	17
다) MySQL 설정	21
라) Bugzilla Setup	22
마) 웹 서버 설정	24
바) 설치 완료	27
5. 참고 문헌	36

1. 문서 개요

가. 문서의 목적

본 문서는 Bugzilla의 설치 및 운영을 위한 기능 설명서로 다음과 같은 세부 목적을 달성하기 위해서 작성 되었다.

- Bugzilla 설치 방법
- Bugzilla 운영 방법

나. 본 문서의 사용방법

본 문서는 다음과 같은 방법으로 활용 될 수 있다.

- Bugzilla의 설치 방법 확인
- Bugzilla Solution 활용 가이드

다. 참고 사항

- Bugzilla의 설치 목적은 Bugzilla Solution의 활용에 있다.
- 설치 프로그램은 www.bugzilla.org 사이트에서 다운로드 한다.
- 설치 버전은 2007. 02. 07일 기준으로 최신버전으로 2.22.2 버전을 사용한다.
- 설치 서버는 삼성 SS120-G 서버(OSTSC-S003) 이며 ip주소는 210.183.235.63을 사용한다
- 현재 나와있는 Bugzilla 한글 버전은 2.16.3으로 2003년에 발표된 구 버전이며, 보안상 문제 점이 발견되어 업그레이드를 해야 하므로 최신 영문버전으로 사용한다.
- OS는 Full Install 하였으며 파티션은 LVM을 이용하였다.

2. 설치 환경

항목	내역	수량	비고
Server	Samsung SS120-G	1	
CPU	Intel Xeon 3.06GHz	2	2 CPU
Mem	1GB	2	2G
HDD	SCSI 36.7GB	2	73GB
OS	Fedora 5	1	
Solution	Bugzilla-2.22.2.tar.gz		Source

3. Bugzilla 설치 전 준비사항

- perl(5.6.1이후 버전 설치)
확인 명령 : 'perl -v'
- Database 설치(MySQL 4.0.14버전 이상)
확인 명령 : 'mysql -V'
- WebServer 설치
- Perl Module 설치
- Mail Transfer Agent 설치(Sendmail 8.7버전 이상)
확인 명령 : 'sendmail -d0.1'

4. Bugzilla 설치

가. Perl Module 설치

- bugzilla를 사용하기 위해서 필요한 Perl Module은 다음과 같다.
 - AppConfig(1.52)
 - CGI(2.93)
 - Data::Dumper(any)
 - Date::Format(2.21)
 - DBI(1.38)
 - DBD::mysql(2.9003) [mysql 사용시]
 - File::Spec(0.84)
 - File::Temp(any)
 - Template(2.10)
 - Text::Wrap(2001.0131)
 - Mail::Mailer(1.67)
 - MIME::Base64(3.01)
 - MIME::Parser(5.406)
 - Storable(any)
- Optional Perl Modules
 - GD(1.20)
 - Chart::Base(1.0)
 - GD::Graph(any)
 - GD::Text::Align(any)

- XML::Twig(any)
- PatchReader(0.9.4)
- Image::Magick(any)
- 시스템에 설치 되지 않은 Perl Module을 확인하기 위해서는 다음 명령을 이용하여 확인한다.
 - `checksetup.pl --check-modules`
- 빠진 모듈들은 다음 명령을 통해 설치한다.
 - `perl -MCPAN -e 'install "<module_name>"'`

```
[root@bugzilla bugzilla]# ./checksetup.pl --check-modules

Checking perl modules ...
Checking for   AppConfig (v1.52)      not found
Checking for   CGI (v2.93)           ok: found v3.15
Checking for   Data::Dumper (any)     ok: found v2.121_08
Checking for   Date::Format (v2.21)   not found
Checking for   DBI (v1.38)           ok: found v1.50
Checking for   File::Spec (v0.84)     ok: found v3.12
Checking for   File::Temp (any)       ok: found v0.16
Checking for   Template (v2.10)      not found
Checking for   Text::Wrap (v2001.0131) ok: found v2005.082401
Checking for   Mail::Mailer (v1.67)   not found
Checking for   MIME::Base64 (v3.01)   ok: found v3.07
Checking for   MIME::Parser (v5.406)  not found
Checking for   Storable (any)         ok: found v2.15

The following Perl modules are optional:
Checking for   GD (v1.20)             not found
Checking for   Template::Plugin::GD::Image (any) not found
Checking for   Chart::Base (v1.0)     not found
Checking for   XML::Twig (any)        not found
Checking for   GD::Graph (any)        not found
Checking for   GD::Text::Align (any)  not found
Checking for   PatchReader (v0.9.4)   not found
Checking for   Image::Magick (any)     not found
Checking for   HTML::Parser (v3.40)   ok: found v3.50
Checking for   HTML::Scrubber (any)    not found
```

시스템에 설치되어
있지 않은 모듈 체크

If you you want to see graphical bug charts (plotting historical data over time), you should install libgd and the following Perl modules:

```
GD:      /usr/bin/perl -MCPAN -e 'install "GD"'
Chart:   /usr/bin/perl -MCPAN -e 'install "Chart::Base"'
```

If you want to use the bug import/export feature to move bugs to or from other bugzilla installations, you will need to install the XML::Twig module by running (as root):

```
/usr/bin/perl -MCPAN -e 'install "XML::Twig"'
```

If you want to convert BMP image attachments to PNG to conserve disk space, you will need to install the ImageMagick application Available from <http://www.imagemagick.org>, and the Image::Magick Perl module by running (as root):

```
/usr/bin/perl -MCPAN -e 'install "Image::Magick"'
```

If you you want to see graphical bug reports (bar, pie and line charts of current data), you should install libgd and the following Perl modules:

```
GD: /usr/bin/perl -MCPAN -e 'install "GD"'
GD::Graph: /usr/bin/perl -MCPAN -e 'install "GD::Graph"'
GD::Text::Align: /usr/bin/perl -MCPAN -e 'install "GD::Text::Align"'
Template::Plugin::GD: /usr/bin/perl -MCPAN -e 'install "Template::Plugin::GD"'
```

If you want to see pretty HTML views of patches, you should install the PatchReader module:
PatchReader: /usr/bin/perl -MCPAN -e 'install "PatchReader"'
If you want additional HTML tags within product and group descriptions, you should install:
HTML::Scrubber: /usr/bin/perl -MCPAN -e 'install "HTML::Scrubber"'

Bugzilla requires some Perl modules which are either missing from your system, or the version on your system is too old.
They can be installed by running (as root) the following:

```
/usr/bin/perl -MCPAN -e 'install "MIME::Parser"'
Minimum version required: 5.406
/usr/bin/perl -MCPAN -e 'install "Mail::Mailer"'
Minimum version required: 1.67
/usr/bin/perl -MCPAN -e 'install "AppConfig"'
Minimum version required: 1.52
/usr/bin/perl -MCPAN -e 'install "Template"'
Minimum version required: 2.10
/usr/bin/perl -MCPAN -e 'install "Date::Format"'
Minimum version required: 2.21
```

```
21 perl -MCPAN -e 'install "AppConfig"'
22 perl -MCPAN -e 'install "Date::Format"'
23 perl -MCPAN -e 'install "Template"'
24 perl -MCPAN -e 'install "Mail::Mailer"'
25 perl -MCPAN -e 'install "MIME::Parser"'
26 perl -MCPAN -e 'install "GD"'
27 perl -MCPAN -e 'install "Template::Plugin::GD::Image"'
28 perl -MCPAN -e 'install "Chart::Base"'
29 perl -MCPAN -e 'install "XML::Twig"'
30 perl -MCPAN -e 'install "GD::Graph"'
31 perl -MCPAN -e 'install "GD::Graph"'
32 perl -MCPAN -e 'install "GD::Text::Align"'
33 perl -MCPAN -e 'install "PatchReader"'
34 perl -MCPAN -e 'install "Image::Magick"'
35 perl -MCPAN -e 'install "HTML::Scrubber"'
```

설치되어 있지 않은
모듈 설치

나. localconfig

- checksetup.pl 명령을 실행하여 localconfig 파일을 생성한다.
- localconfig 파일에는 DB connection에 대한 정보가 들어있다.
- localconfig 파일 설정
 - \$db_host, \$db_name, \$db_user, \$db_pass 설정 확인

```
#
# How to access the SQL database: DB Connect 설정
#
$db_host = 'localhost';      # where is the database?
$db_name = 'bugs';          # name of the SQL database
$db_user = 'bugs';          # user to attach to the SQL database

# Sometimes the database server is running on a non-standard
# port. If that's the case for your database server, set this
# to the port number that your database server is running on.
# Setting this to 0 means "use the default port for my database
# server."
$db_port = 0;
```

다. MySQL 설정

- MySQL에 대해 환경 설정을 한다.

```
- /etc/my.cnf

[mysqld]

# Allow packets up to 1M
max_allowed_packet=1M

# Allow small words in full-text indexes
ft_min_word_len=2
```

- MySQL 계정 생성

```
mysql> grant select, insert, update, delete, index, alter, create,
lock tables, create temporary tables, drop, references
on bugs.* to bugs@localhost identified by '<db_pass>';
mysql> flush privileges;
mysql> use bugs;
mysql> alter table attachments AVG_ROW_LENGTH=1000000,
MAX_ROWS=20000;
```

```
[mysqld]
datadir=/var/lib/mysql
socket=/var/lib/mysql/mysql.sock
# Default to using old password format for compatibility with mysql 3.x
# clients (those using the mysqlclient10 compatibility package).
old_passwords=1
##### Adding Line #####
# Allow packets up to 1M
max_allowed_packet=1M
# Allow small words in full-text indexes
ft_min_word_len=2
#####
```

MySQL DB 설정

```
mysql> create database bugs;
Query OK, 1 row affected (0.02 sec)

mysql> grant select, insert, update, delete, index, alter, create, lock tables,
-> create temporary tables, drop, references on bugs.* to bugs@localhost
-> identified by 'roqkf1a';
Query OK, 0 rows affected (0.00 sec)

mysql> flush privileges;
Query OK, 0 rows affected (0.00 sec)
```

bugs 계정, DB 생성
및 권한 설정

라. Bugzilla Setup

- checksetup.pl 명령 실행

```
Populating duplicates table...
Creating duplicates directory...
Migrating old chart data into database ...
Initializing "Dependency Tree Changes" email_setting ...
Adding group tweakparams ...
Adding group editusers ...
Adding group creategroups ...
Adding group editclassifications ...
Adding group editcomponents ...
Adding group editkeywords ...
Adding group admin ...
Adding group editbugs ...
Adding group canconfirm ...
Adding group bz_canusewhines ...
Adding group bz_canusewhineatothers ...
Adding group bz_sudoers ...
Adding group bz_sudo_protect ...
Adding a new user setting called 'display_quips'
Adding a new user setting called 'comment_sort_order'
Adding a new user setting called 'post_bug_submit_action'
Adding a new user setting called 'csv_colsepchar'
Adding a new user setting called 'per_bug_queries'

Looks like we don't have an administrator set up yet.
Either this is your first time using Bugzilla, or your
administrator's privileges might have accidentally been deleted.
Enter the e-mail address of the administrator: junid@tsgroup.oss.or.kr
You entered junid@tsgroup.oss.or.kr. Is this correct? [Y/n] y
Enter the real name of the administrator: junid
Enter a password for the administrator account:
Please retype the password to verify:
junid@tsgroup.oss.or.kr is now set up as an administrator account.
Now that you have installed Bugzilla, you should visit the
'Parameters' page (linked in the footer of the Administrator
account) to ensure it is set up as you wish - this includes
setting the 'urlbase' option to the correct url.
[root@bugzilla bugzilla]#
```

설치 화면

마. 웹 서버 설정

- httpd.conf 설정

```
DocumentRoot /var/www/html/bugzilla

<Directory /var/www/html/bugzilla>

    AddHandler cgi-script .cgi

    Options +Indexes +ExecCGI

    DirectoryIndex index.cgi

    AllowOverride Limit

</Directory>

DirectoryIndex index.cgi index.html index.html.va
```

```
# DocumentRoot: The directory out of which you will serve your
# documents. By default, all requests are taken from this directory, but
# symbolic links and aliases may be used to point to other locations.
#
DocumentRoot "/var/www/html/bugzilla"

#
# Each directory to which Apache has access can be configured with respect
# to which services and features are allowed and/or disabled in that
# directory (and its subdirectories).
#
# First, we configure the "default" to be a very restrictive set of
# features.
#
<Directory /var/www/html/bugzilla>
    AddHandler cgi-script .cgi
    Options +Indexes +ExecCGI
    DirectoryIndex index.cgi
    AllowOverride Limit
</Directory>

#
# DirectoryIndex: sets the file that Apache will serve if a directory
# is requested.
#
# The index.html.var file (a type-map) is used to deliver content-
# negotiated documents. The MultiViews Option can be used for the
# same purpose, but it is much slower.
#
DirectoryIndex index.cgi index.html index.html.var
```

웹서버 설정 파일 수정

바. 설치 완료

- <http://server-ip> - 웹 브라우저를 통해 설치 완료 확인



5. 참고 문헌

- <http://www.bugzilla.org>
- <http://kldp.net/projects/bugzilla-kr/>
- bugzilla-2.22.2/docs/txt/Bugzilla-Guide.txt