

## Template::Toolkit, not on the Web

Marty Pauley <marty@kasei.com>

火星

YAPC::Asia 東京 2006

Slide 1

# Contents

<b>Introduction</b>	<b>2</b>
<b>Mail Merge</b>	<b>3</b>
Mail Merge: template . . . . .	4
Mail Merge: command . . . . .	5
Mail Merge: longer command . . . . .	6
Mail Merge: longer template . . . . .	7
<b>Apache Configuration</b>	<b>8</b>
Apache Configuration . . . . .	9
Apache Configuration: script . . . . .	10
<b>Java Code</b>	<b>11</b>
Java Code: Hello World . . . . .	12
Java Code: simpler Hello World . . . . .	13
Java Code: main template . . . . .	14
Java Code: object example . . . . .	15
Java Code: object example . . . . .	16
Java Code: object example . . . . .	17
Java Code: simpler object . . . . .	18
Java Code: class template . . . . .	19
Java Code: class template . . . . .	20
Java Code: class template . . . . .	21
Java Code: Makefile . . . . .	22
<b>Perl Code</b>	<b>23</b>
Perl Code: template . . . . .	24
Perl Code: template . . . . .	25

Slide 2

## Introduction

www.template-toolkit.org says:

The Template Toolkit is a fast, powerful and extensible template processing system. It is ideally suited to the production and maintenance of web content and other dynamic document systems.

Slide 3

## Mail Merge

To: Marty Pauley <marty@kasei.com>  
From: <gwbush@hotmail.com>  
Subject: Make \$\$\$ fast with cheap Viagra

Dear Marty Pauley

This is not SPAM. I am MRS UMBALAGO KENNEDY-SMITH, wife of ex-president MUFASSA and mother of three hot teenage sluts who need your help to sell \$40,000,000 (40 million US) of prescription meds.

**Slide 4**

**Mail Merge: template**

```
To: [% sucker %] <[% email %]>  
From: <gwbush@hotmail.com>  
Subject: Make $$$ fast with cheap Viagra
```

Dear [% sucker %]

This is not SPAM. I am MRS UMBALAGO KENNEDY-SMITH,  
wife of ex-president MUFASSA and mother of three hot  
teenage sluts who need your help to sell \$40,000,000  
(40 million US) of prescription meds.

**Slide 5**

**Mail Merge: command**

```
tpage --define sucker="Marty Pauley"  
--define email="marty@kasei.com"  
spam.tt | sendmail -i marty@kasei.com
```

**Slide 6**

### Mail Merge: longer command

```
/usr/bin/tpage --define type='$NOTIFICATIONTYPE$'  
--define when='$DATETIME$'  
--define hostname='$HOSTNAME$'  
--define hostalias='$HOSTALIAS$'  
--define hostaddress='$HOSTADDRESS$'  
--define hoststate='$HOSTSTATE$'  
--define output='$OUTPUT$'  
/etc/nagios/tt/email-host.tt | /usr/bin/mail  
-s "$TYPE$: $HOSTALIAS$ is $HOSTSTATE$"  
$CONTACTEMAIL$
```

**Slide 7**

### Mail Merge: longer template

```
[% type %] at [% when %]  
[% hostalias %] ([% hostname %]:  
[% hostaddress %]) is [% hoststate %]  
  
[% IF hoststate == 'DOWN' %]  
All services on [% hostname %] will be unusable  
while the host is down.  
[% ELSIF hoststate == 'UNREACHABLE' %]  
We don't know what's wrong with [% hostname %]  
but it's unreachable and probably useless.  
[% END %]  
  
The test reported: [% output %]
```

Slide 8

## Apache Configuration

```
[% DEFAULT
  home = "/home/$user"
  serverroot = home _ "/www/etc"
  docroot = home _ "/www/htdocs"
  gid = user
  email = user _ "@kasei.com"
%]
ServerRoot [% serverroot %]
DocumentRoot [% docroot %]
Port [% port %]
User [% user %]
Group [% gid %]
ServerAdmin [% email %]
```

Slide 9

## Apache Configuration

```
<Directory [% docroot %]>
  Options Indexes Includes FollowSymLinks MultiViews
  AllowOverride None
  Order allow,deny
  Allow from all
</Directory>
```

Slide 10

### Apache Configuration: script

```
#!/usr/bin/perl
use Template;

my $user = shift or die "syntax: $0 <user>\n";
my $uid = getpwnam $user or die "invalid user '$user'\n";

my $tt = Template->new;
$tt->process("httpd.tt", {
    user => $user,
    port => 8000+$uid
}) or die $tt->error . "\n";
```

Slide 11

### Java Code

**AAARRGH!**

### Java Code: Hello World

```
public class hello {  
    public static void main(String[] argv) {  
        System.out.println("Hello World");  
    }  
}
```

Slide 12

### Java Code: simpler Hello World

```
[% WRAPPER main name="hello" %]  
  
    System.out.println("Hello World");  
  
[% END %]
```

Slide 13

### Java Code: main template

```
public class [% name %] {  
    public static void main(String[] argv) {  
        [% content %]  
    }  
}
```

Slide 14

### Java Code: object example

```
public class greeter {  
    private int x;  
    private int y;  
    private int z;  
    private String lang;
```

Slide 15

Slide 16

### Java Code: object example

```
public int get_x() {  
    return x;  
}  
public int get_y() {  
    return y;  
}  
public int get_z() {  
    return z;  
}  
public String get_lang() {  
    return lang;  
}
```

Slide 17

### Java Code: object example

```
public void greet(String[] argv) {  
    System.out.println("Hello World");  
}  
}
```

Slide 18

### Java Code: simpler object

```
[% WRAPPER class name="greeter"
  members = {
    int => ["x","y","z"],
    String => ["lang"],
  }
%]

public void greet(String[] argv) {
  System.out.println("Hello World");
}

[% END %]
```

Slide 19

### Java Code: class template

```
public class [% name %] {
  [%- FOR type = members.keys %]
    [%- FOR var = members.$type %]
      private [% type %] [% var %];
    [%- END %]
  [%- END %]
}
```

Slide 20

### Java Code: class template

```
[%- FOR type = members.keys %]  
  [%- FOR var = members.$type %]  
  public [% type %] get_[% var %]() {  
    return [% var %];  
  }  
  [%- END %]  
[%- END %]
```

Slide 21

### Java Code: class template

```
[% content %]  
}
```

Slide 22

### Java Code: Makefile

```
all: hello.class greeter.class

%.class: %.java
    javac $<

%.java: %.tt
    tpage $< > $@
```

Slide 23

### Perl Code

The basic structure of all your modules or scripts is the same.

- initial POD
- use strict;
- copyright

**Slide 24**

**Perl Code: template**

```
package [% Package %];

=head1 NAME

[% Package %] - a useful module with a useless abstract

=head1 SYNOPSIS

    use [% Package %];

=cut
```

**Slide 25**

**Perl Code: template**

```
use strict;
use warnings;

# insert code here

[% INCLUDE copyright %]

1;
```