

# **Interchange Upgrade Guide**



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# 1. Introduction

This document contains, in rough form, notes on upgrading from Minivend 3 to Minivend 4, and Minivend 4 to Interchange.



## 2. Interchange 4.8 Deprecated Features

This document describes features of Interchange 4.8 that have been deprecated. Any use of these features should be discontinued. In most cases we have provided an alternative mechanism to accomplish the same results. These deprecated features may be removed at some point in the future. You should change to the new mechanism to avoid breakage.

### 2.1. Deprecated Features Previous to Interchange 4

This section needs some serious work.

#### **cart/page from path**

interchange.PL 308,313

```
if($path =~ s/(.*)::) {
    $cart = $1;
    if($cart =~ s/(.*)::) {
        $page = $1;
    }
}
```

#### **mv\_orderpage**

interchange.PL 321,323

```
$CGI::values{mv_nextpage} = $CGI::values{mv_orderpage}
                           || find_special_page('order')
if ! $CGI::values{mv_nextpage};
```

#### **\$decode**

interchange.PL 493

```
HTML::Entities::decode($value) if $decode;
```

#### **mv\_orderpage**

interchange.PL 854,855

```
$CGI::values{mv_nextpage} = $CGI::values{mv_orderpage}
                           if $CGI::values{mv_orderpage};
```

#### **ROUTINES and LANG**

interchange.PL 1552,1579

```
ROUTINES: {
    last ROUTINES
    unless index($Vend::FinalPath, '/process/') == 0;
    while (
        $Vend::FinalPath =~
            s{/process/(locale|language|currency)/([^\s]*)/}
```

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```
        {/process/}
    )
    {
        $::Scratch->{"mv_$1"} = $2;
    }
    $Vend::FinalPath =~ s:/process/page/::/;
}
my $locale;
if($locale = $::Scratch->{mv_language}) {
    $Global::Variable->{LANG}
        = $::Variable->{LANG} = $locale;
}

if ($Vend::Cfg->{Locale}
    and $locale = $::Scratch->{mv_locale}
    and defined $Vend::Cfg->{Locale_repository}->{$locale}
)
{
    $Global::Variable->{LANG}
        = $::Variable->{LANG}
        = $::Scratch->{mv_language}
        = $locale
        if ! $::Scratch->{mv_language};
    Vend::Util::setlocale( $locale,
        ($::Scratch->{mv_currency} || undef),
        { persist => 1 }
    );
}
```

### **list\_compat**

lib/Vend/Interpolate.pm 2808

```
list_compat($opt->{prefix}, \ $text);
```

lib/Vend/Interpolate.pm 3538

```
list_compat($opt->{prefix}, \ $text);
```

lib/Vend/Interpolate.pm 3874

```
list_compat($opt->{prefix}, \ $page);
```

### **find\_sort**

lib/Vend/Interpolate.pm 3270,3271

```
$text =~ /^s*\[sort\s+.*\/si
    and $opt->{sort} = find_sort(\ $text);
```

### **mv\_order\_report**

lib/Vend/Order.pm 867,868

```
$body = readin($::Values->{mv_order_report})
    if $::Values->{mv_order_report};
```



**mv\_error\_\$var**

lib/Vend/Order.pm 1030

```
$::Values->{"mv_error_$var"} = $message;
```

## 2.2. Interchange 4 Deprecated Features

**Vend::Util::send\_mail Vend::Order::send\_mail send\_mail**

The send\_mail routine has been replaced by the Vend::Mail::send routine.



## 3. Upgrading from Minivend 4.0 to Interchange 4.6

if [item-price] suddenly turns 0, check PriceField in the catalog.cfg

### 3.1. minivend.cfg

- Remove references to MiniMate.
- Add this line to minivend.cfg:  
#include lib/UI/ui.cfg

Make sure the files catalog\_before.cfg and catalog\_after.cfg are there, or add their contents to etc/your\_cat\_name.before and etc/your\_cat\_name.after to it only for some catalogs.

### 3.2. Access Manager

You need to get the minimate.asc file renamed to access.asc and add the following fields to the first line:

```
groups
last_login
name
password
```

Remove these catalog.cfg lines:

Variable	MINIMATE_META	mv_metadata	
Variable	MINIMATE_TABLE	minimate	
Database	minimate	minimate.asc	TAB

Add this one:

Database	affiliate	affiliate.txt	TAB
----------	-----------	---------------	-----

Authentication for admin users is now done from a separate table than customers, and passwords are encrypted.

### 3.3. Database Editing

Update the mv\_metadata.asc file as appropriate.

### 3.4. Order Manager

Some things that are needed for the order manager:

- Add these fields to transactions:

affiliate	approx. char(32)
archived	char(1)
campaign	approx. char(32)
comments	blob/text
complete	char(1)

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```
deleted      char(1)
order_wday   char(10)
order_ymd    char(8)
po_number    approx. char(32)
```

- Add these fields to transactions:

```
affiliate     approx. char(32)
campaign      approx. char(32)
```

- Remove this field from userdb:

```
mv_credit_card_info
```

- Add these fields to userdb:

```
inactive      char(1)
credit_limit   char(14) or decimal(12,2)
dealer        char(3)
```

- Create the directory 'logs'.
- Create the directory 'orders' if it doesn't already exist.
- Update your order routes to those in the Interchange distribution. Note that the route `log_entry` is necessary if you want to enter orders from the Interchange UI.
- Update the `etc/log_transaction` file.
- Add the `etc/log_entry` file.
- Add this to `catalog.cfg`:

```
## Don't want people setting their credit_limit directly
UserDB default scratch "credit_limit dealer"
```

### 3.5. Affiliates

Add a tab-delimited affiliate table:

```
affiliate name    campaigns    join_date    url timeout active    password
```

You can find a recommended database configuration in `foundation/dbconf/*/affiliate.*`.

### 3.6. Page Editor

Add the directories 'templates' and 'backup'. Copy the contents of the Interchange `simple/templates` to `templates`.

### 3.7. Item Editor

Add a merchandising table with the following fields:

```
Database merchandising merchandising.txt __SQLDSN__
Database merchandising DEFAULT_TYPE text

sku                char(32)
```

```
featured          char(32)
banner_text
banner_image
blurb_begin
blurb_end
timed_promotion   char(16)
start_date        char(24)
finish_date       char(24)
upsell_to
cross_sell
cross_category    char(64)
others_bought
times_ordered
```

Index the fields with char(\*) types. You can find the recommended database configuration in `foundation/dbconf/*/merchandising.*`

### 3.8. Preferences Editor (KNAR)

Create the tab-delimited file `variable.txt` with these fields:

```
code  Variable  pref_group
```

Add this as the `*first*` line of `catalog.cfg`:

```
VariableDatabase variable
```

### 3.9. Route Editor

Create the file `route.txt` with these fields:

```
code
report
receipt
encrypt_program
encrypt
pgp_key
pgp_cc_key
cyber_mode
credit_card
profile
inline_profile
email
attach
counter
increment
continue
partial
supplant
track
errors_to
```

Add this line in `catalog.cfg`:

```
RouteDatabase route
```

## 3.10. Transactions database

The back office UI should work fine for editing database tables. Obviously the things which are specific to the order transaction setup will break unless you have the right fields, but even these can be controlled by configuring the UI.

Add a new field to transaction.txt called 'archived'.

## 4. Upgrading from Minivend 3 to Minivend 4

There were big changes from Minivend 3 to Minivend 4, some of which were incompatible.

Many things were removed as redundant, deprecated, or just plain crufty:

### 4.1. Nested [loop]s

MV3 used a different scheme for creating nested loop lists:

```
[loop with="-a"* arg="item item item" search="se=whatever"]
```

allowed you to refer to the nested values with a [loop-code-a] construct. In Minivend 4, the form is:

```
[loop prefix=size list="Small Medium Large"]
  [loop prefix=color list="Red White Blue"]
    [color-code]-[size-code]<BR>
  [/loop]
<P>
[/loop]
```

### 4.2. All frame features removed

Frames are now managed by the user in HTML.

### 4.3. Tags removed

#### 4.3.1. buttonbar

Replace with Variable defined in catalog.cfg. buttonbar was previously used as an SSI-like command for catalog-wide standardized features like navigation bars. In the 3.x catalog.cfg the ButtonBars parameter defines a list of html snippets, like

```
ButtonBars header.html footer.html copyright.html
```

So [buttonbar 0] substitutes 'header.html', [buttonbar 1] substitutes 'footer.html', etc.

In 4.x catalog.cfg, define variables, like

```
Variable HEADER      <pages/header
Variable FOOTER      <pages/footer
Variable COPYRIGHT    <pages/copyright
```

Then replace all occurrences of [buttonbar 0] with \_\_HEADER\_\_, [buttonbar 1] with \_\_FOOTER\_\_, etc.

Note that the old header.html, footer.html, etc. contained html code, but were not actually html pages with <html><body> etc, tags. Thus the current practice is to use filenames with no extension or perhaps '.txt' to differentiate them from pages.

### 4.3.2. random

Replace with [ad random=1] or custom code. See the [ad] tag docs. Random and rotate were used to place random or rotating regions on pages, such as banner ads.

The Random directive in catalog.cfg defines the numbered HTML snippet files, similar to buttonbars above.

### 4.3.3. rotate

Replace with [ad ...]. See [random] above.

### 4.3.4. help

No replacement. Use data functions or variables.

### 4.3.5. body

Replace with templates. Again the body tag [body 1] etc. defines numbered body definitions that could be applied site-wide. However, in this case minivend actually built up the <body ....> substitution using the Mv\_\* directives in catalog.cfg.

### 4.3.6. finish\_order

[finish\_order] was a conditional tag; if the basket contained anything a 'checkout' graphic would be displayed. No replacement; use [if items]Message[/if].

### 4.3.7. last\_page

No replacement – this can be emulated by setting a scratch variable on one page, then using it to build the return URL.

### 4.3.8. item-link

No replacement, just use [page [item-code]].

### 4.3.9. loop-link

No replacement, just use [page [loop-code]].

### 4.3.10. sql-link

No replacement, just use [page [sql-code]].

### 4.3.11. accessories

Replace with normal data functions.



### 4.3.12. Compatibility routines

Compatibility routines for many popular tags like [random], [rotate], etc. are provided in the appendix of this document. To use one, copy it to a file and put it in your usertag directory. (Tags in the usertag directory are read in by interchange.cfg by default).

## 4.4. Directives removed

```
ActionMap
AdminDatabase
AdminPage
AsciiBackend
BackendOrder
ButtonBars
CheckoutFrame
CheckoutPage
CollectData
DataDir
Delimiter
DescriptionTrim
FieldDelimiter
FrameFlyPage
FrameLinkDir
FrameOrderPage
FrameSearchPage
ItemLinkDir
ItemLinkValue
MsqlDB
MsqlProducts
Mv_AlinkColor
Mv_Background
Mv_BgColor
Mv_LinkColor
Mv_TextColor
Mv_VlinkColor
NewReport
NewTags
OldShipping
OrderFrame
PageCache
PriceDatabase
Random
ReceiptPage
RecordDelimiter
ReportIgnore
Rotate
SearchFrame
SearchOverMsg
SecureOrderMsg
SpecialFile
SubArgs
Tracking
```

## 4.5. Minor operations removed

- auto-substitution of mp= on [loop search=profile], [search-region arg=profile]
- [tag scan]...

- [tag sql]...

Many of these are related to one of:

- Removal of frames logic
- Removed tags
- Obsolete methods
- Old routines for 2.0x compatibility

## 4.6. Search lists

Search tags must now be surrounded by [search-region] [/search-region]. This is because multiple searches can be done in a page, with multiple [more-list] entries, multiple [no-match] areas, etc. It was not really possible to avoid this and add the feature.

To find all files containing the search list, do:

```
find pages -type f | xargs grep -l '\[search.list'
```

That will yield a set of files that need to be updated. You should surround all parts of the search area, i.e.:

```
[search-region]

[search-list]
    your search iteration stuff, [item-code], etc.
[/search-list]

[more-list]
    [more]
[/more-list]

[/search-region]
```

## 4.7. Search conditionals

Search conditionals should now say [if-item-field field] [/if-item-field] and [if-item-data table column] [/if-item-data]. This allows mixing and nesting of lists. You may find that the old works in some situations, but it will not work in all situations.

## 4.8. Form data updates

Added Scratch variable mv\_data\_enable to gate the update\_data function. You must set it before doing a form update. Prior to this it was possible to update a SQL database willy-nilly.

A quick fix like this will allow the update on a single page:

```
[set update_database]
[set mv_data_enable]1[/set]
[/set]
<INPUT TYPE=hidden NAME=mv_click VALUE=update_database>
```

It will ensure at least that the user loads one form from you for each update. For best security, gate with a userdb entry like this:

```
[set update_database]
[if type=data term="userdb::trusted::[data session username]" ]
  [set mv_data_enable]1[/set]
[else]
  [set mv_data_enable]0[/set]
[/else]
[/if]
[/set]
```

## 4.9. Checkout changes

Minivend 4 uses in-page error-flagging on the checkout page. Simplest way to convert is probably to use the checkout.html from the simple demo as a start, and move in any customization from the existing site's catalog.html (headers, footers, logos, etc.) A line-by-line comparison of the data fields in the checkout page should be performed, adding any custom fields as needed. Custom error checking in etc/order.profiles may have to be re-worked, or can be added into checkout.html using the in-page order profile capability. (Note that etc/order.profiles is called etc/profiles.order in newly-built Interchange catalogs.)

Remember to update receipt.html and report/report.html with any custom fields, as well.

## 4.10. [if-field] etc.

The least-compatible things in the tag area are [if-field] (needs to be [if-PREFIX-field], where prefix might be item|loop by default depending on the tag. Likewise:

```
[if-data table col] --> [if-PREFIX-data table col]
[on-change mark]    --> [PREFIX-change mark]
[if-param param]    --> [if-PREFIX-param param]
[PREFIX-param N]     --> [PREFIX-pos N] (where N is a digit)
```

## 4.11. [search-list]

You must always surround [search-list] with [search-region] [/search-region].

Embedded Perl changes quite a bit. While there are the \$Safe{values} and other variable settings, they are automatically shared (no arg="values") and move to:

```
$Safe{values}  --> $Values
$Safe{cgi}     --> $CGI
$Safe{carts}   --> $Carts
$Safe{items}   --> $Items
$Safe{config}  --> $Config
$Safe{scratch} --> $Scratch
```

There are a number of other objects, see the docs.

Most other issues have more to do with the catalog skeleton (i.e. simple or barry or basic or art) than they do the core. For instance, the "basic" catalog produced for MV3 ran unchanged except for the issues discussed above.

## 4.12. Global subs

Accessing globalsubs from [perl] tags is done slightly differently.

Minivend 3 method:

```
[perl sub]
myfunsub();
[/perl]
```

Minivend 4/IC method:

```
[perl subs=1]
myfunsub();
[/perl]
```

If you do this wrong, you'll get an error that looks like this:

```
115.202.115.237 H8gbq6oK:115.202.115.237 - \
[28/February/2001:18:58:50 -0500] testcat /cgi-bin/testcat.cgi \
Safe: Undefined subroutine &MVSAFE::myfunsub called at (eval 283) line 2.
```

## 5. History of Interchange

Interchange is a descendent of Vend, an e-commerce solution originally developed by Andrew Wilcox in early 1995. Mike Heins took the first publicly-released version, Vend 0.2, and added searching and DBM catalog storage to create MiniVend. Mike released MiniVend 0.2m7 on December 28, 1995. Subsequent versions of MiniVend took parts from Vend 0.3, especially the vlink and Server.pm modules, which were adapted to run with MiniVend. In the four years that followed, Mike Heins expanded and enhanced MiniVend, creating a powerful and versatile e-commerce development platform. MiniVend grew to support thousands of businesses and their e-commerce sites, and sites running on MiniVend versions 3 and 4 are still common today.

Separately, an experienced e-commerce development team founded Akopia. Their goal was to create a sophisticated open source e-commerce platform that was both feature-rich and easy to use. Their product, Tallyman, was intuitive, and had great content-management features, but lacked many of MiniVend's capabilities.

Akopia acquired MiniVend in June 2000. Mike Heins and the Tallyman developers combined MiniVend 4 with Tallyman's features to create Interchange. Interchange replaces both MiniVend and Tallyman. In order to preserve compatibility, the name "minivend" and prefixes like "mv\_" and "MVC\_" will still appear in source code and configuration files. Interchange's first stable release was version 4.6.

In January 2001, Red Hat acquired Akopia and created its new E-Business Solutions Division. Red Hat sponsored the development of Interchange 4.8 and the Red Hat E-Commerce Suite.

In mid-2002, Red Hat decided to stop supporting Interchange development, and a group of individuals formed the Interchange Development Group to coordinate Interchange development independent of any company or person. The first stable release by the new independent group of developers was Interchange 5.0.

Interchange continues to advance, the user community is growing, and new Interchange sites are frequently deployed.

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