

The httpd Configuration API

The background of the slide is a photograph of the Texas State Capitol building in Austin, Texas. In the foreground, there is the Lone Star Monument, which features three bronze statues on a tiered pedestal. The sky is blue with some light clouds. The text is overlaid on semi-transparent rectangular boxes.

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Module Identifier

```
AP_DECLARE_MODULE(foo) =  
{  
    STANDARD20_MODULE_STUFF,  
    create_dir_foo_config,  
    merge_dir_foo_config,  
    create_server_foo_config,  
    merge_server_foo_config,  
    foo_cmds,  
    register_foo_hooks  
};
```

http_config.h

- Defines `command_struct`, the members of the command list array
- Offers common directive handlers (`on|off`, `int` value etc)
- Offers prototypes for custom command handlers
- Defines the macro wrappers for individual command list entries

command_struct

```
struct command_struct {  
    const char *name;  
    cmd_func func;  
    void *cmd_data;  
    int req_override;  
    enum cmd_how args_how;  
    const char *errmsg;  
};
```

cmd_how – what scope?

- TAKE1, TAKE2, TAKE3
– fixed number of args
- TAKE12 TAKE23, TAKE 13, TAKE123
– alternative number of args
- ITERATE – invoke TAKE1 multiple times
- ITERATE2 – TAKE2, first arg is repeated

cmd_how – more scopes

- `NO_ARGS` – Directive is simply present
- `FLAG` – boolean value
- `TAKE_ARGV` – an `argv[]`, `argc` style list
- `RAW_ARGS` – the unprocessed string

Directive Wrappers

- Simplifies `command_struct` element declaration
- Cleanly formatted, typesafe handler references

Stock Functions

- `ap_set_string_slot`
- `ap_set_int_slot`
- `ap_set_string_slot_lower`
- `ap_set_flag_slot`
- `ap_set_flag_slot_char`
- `ap_set_file_slot`

Stock Args

- `cmd_data` must be the field offset within the server or dir config structure
- Config merge must still be handled by the module author
- `ap_set_deprecated` is a no-op, warning stock handler

Scope Options

- RSRC_CONF - Global/VHost scope only
- ACCESS_CONF - Per-dir/htaccess scope
- OR_LIMIT, _OPTIONS, _FILEINFO, _AUTHCFG, _INDEXES, and _ALL
- - Enforce specific AllowOverride (OR_ALL for anywhere)

More Options

EXEC_ON_READ

- Invoke command handler immediately
(Otherwise invoked after the tree is read)

NONFATAL_OVERRIDE, _UNKNOWN, or _ALL

- proceed if AllowOverride violated or out of scope

Tour of Examples

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Questions?

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