Hal Documentation

Release 1.0

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July 16, 2016

Contents

Contents:

Configuration

Hal doesn't have any command line options. Instead we utilize environment variables exclusively, allowing you to use hal in more flexible ways.

```
PORT=9000              # The port on which the HTTP server will listen.
                       # Default: 9000
HAL_NAME=hal           # The name to which Hal will respond.
                       # Default: hal
HAL_ADAPTER=shell      # The adapter name.
                       # Default: shell
                       # Options: shell, slack, irc
HAL_LOG_LEVEL=info     # The level of logging desired.
                       # Default: info
                       # Options: info, debug, warn, error, critical
```

Adapters

Adapters are how hal integrates with your chat services.

2.1 Campfire

Coming soon!

2.1.1 Usage

2.1.2 Configuration

2.2 Hipchat

2.2.1 Setup

Hal uses Hipchat's XMPP gateway and so requires a user account to integrate with Hipchat. Be sure to create one before configuring the adapter. You will need the XMPP credentials, which can be found at https://my.hipchat.com/account/xmpp.

2.2.2 Usage

```
// blank import to register adapter
import _ "github.com/danryan/hal/adapter/hipchat"
```

2.2.3 Configuration

Set the following environment variables according to your needs.

HAL_ADAPTER

To use the Hipchat adapter, set HAL_ADAPTER to hipchat.

HAL_HIPCHAT_USER

The username is the first part of your XMPP JID before the `@` sign. E.g., if your JID is `134273_971874@chat.hipchat.com`, then `HAL_HIPCHAT_USER` should be `134273_971874`.

- **Default:** none
- **Required:** false
- **Example:** `HAL_HIPCHAT_USER=134273_971874`

HAL_HIPCHAT_PASSWORD

The password is the same as the Hipchat user's password.

- **Default:** none
- **Required:** true
- **Example:** `HAL_HIPCHAT_PASSWORD=supersekretpassword`

HAL_HIPCHAT_ROOMS

This is a comma-separated list of rooms to join. Note that Hipchat has two ways of specifying rooms: a human-readable format (ex. `general`); and an XMPP format (ex. `134273_general`). Hal expects the former human-readable format at this time due to a limitation of the third-party Hipchat package presently used. The rooms are case sensitive as well.

Hal will not fail if no rooms are specified, though hal will also not join any rooms if this is left blank.

- **Default:** none
- **Required:** false
- **Example:** `HAL_HIPCHAT_ROOMS="general,room with spaces,random"`

HAL_HIPCHAT_RESOURCE

This is an optional setting. The default, `bot`, prevents the channel history from being sent and thus prevents hal from parsing possibly already handled messages. If changed from the default, `bot`, channel history will be sent. It is recommended that the default be left unless you need channel history.

- **Default:** bot
- **Required:** false
- **Example:** `HAL_HIPCHAT_RESOURCE=something-other-than-bot`

2.3 IRC

A simple adapter for use with any IRC server.

2.3.1 Setup

You will need an IRC user and preferred server. If your server requires a password, be sure to provide it using the environment variable below.

2.3.2 Usage

```
// blank import to register adapter
import _ "github.com/danryan/hal/adapter/irc"
```

2.3.3 Configuration

```
HAL_ADAPTER=irc                  # The adapter
                                 # Default: shell
HAL_IRC_USER=blah                # IRC username
                                 # Default: none (required)
HAL_IRC_PASSWORD=sekret          # IRC password if required
                                 # Default: none (optional)
HAL_IRC_NICK=hal                 # IRC nick
                                 # Default: HAL_IRC_USER (optional)
HAL_IRC_SERVER=irc.freenode.net  # IRC server
                                 # Default: none (required)
HAL_IRC_PORT=6667                # IRC server port
                                 # Default: 6667
HAL_IRC_CHANNELS="#foo,#bar"     # Comma-separate list of channels to join after connecting
                                 # Default: none (required)
HAL_IRC_USE_TLS=false            # Use an encrypted connection
```

2.4 Slack

2.4.1 Setup

By default, Hal uses Slack's hubot integration. Currently Hal will listen in on all public channels, or a custom list of channels if `HAL_SLACK_CHANNELS` is declared. Private groups require the IRC gateway to work around a current limitation of the Slack API. See *Using IRC Gateway*. The IRC gateway is the author's preferred method as your bot will automatically join all channels and groups to which it belongs, and removing Hal from a room is as simple as a `/kick hal` command. Some advanced features like attachment uploading are not supported at this time.

Start by adding the Hubot integration for your team (if you haven't done so).

2.4.2 Usage

```
// blank import to register adapter
import _ "github.com/danryan/hal/adapter/slack"
```

2.4.3 Configuration

```
HAL_ADAPTER=slack                # The adapter
HAL_SLACK_TOKEN=blah             # Your integration token
                                 # Default: none (required)
HAL_SLACK_TEAM=acmeinc           # Your Slack subdomain (<team>.slack.com)
                                 # Default: none (required)
HAL_SLACK_BOTNAME=HAL            # The username Hal will send replies as
                                 # Default: HAL_NAME
HAL_SLACK_ICON_EMOJI=":poop:"    # The emoji shortcut used as the response icon
```

```
                                          # Default: none
HAL_SLACK_CHANNELS=""                     # not yet implemented
HAL_SLACK_CHANNEL_MODE=""                  #
HAL_SLACK_LINK_NAMES=""                   # not yet implemented
```

HAL_SLACK_CHANNEL_MODE

Specify how to treat the list of channels in `HAL_SLACK_CHANNELS`'. Disabled if `HAL_SLACK_CHANNELS` is empty.

- **Options:** whitelist, blacklist

- **Default:** whitelist

- **Required:** false

- **Example:** `HAL_SLACK_CHANNEL_MODE=whitelist`

-

Using IRC Gateway

The default integration only works with public chats. If you want hal to listen in on private chats, you must utilize the IRC gateway. You'll need a real user for hal, so be mindful of the username you choose for it and make sure you configure your bot to use that name so it can login to the IRC gateway. When enabled, hal will only use the IRC gateway to listen for messages. Hal can be configured to either respond using the API or the IRC gateway.

1. Enable the IRC gateway in the admin settings interface

    - Choose "Enable IRC gateway (SSL only)". You don't want your private messages sent unencrypted.

2. Register a new user

3. Sign in as this new user

4. Capture your new IRC credentials

5. Set the following environment variables

```
HAL_SLACK_IRC_ENABLED                # Enable the Slack IRC listener
                                     # Default: 0
                                     # Options: 0, 1  ; 0 is disabled, 1 is enabled
HAL_SLACK_IRC_PASSWORD               # The IRC gateway password
                                     # Default: none (required)
HAL_SLACK_RESPONSE_METHOD            # The method by which hal will respond to a message.
                                     # The irc option requires that the IRC gateway be configured
                                     # Default: http
                                     # Options: http, irc
```

For more information, please see the following link: * Connecting to Slack over IRC and XMPP

2.5 Shell

Hal comes with a default shell adapter, useful for testing your response handlers locally.

2.5.1 Setup

No setup is required.

2.5.2 Usage

```
// blank import to register adapter
import _ "github.com/danryan/hal/adapter/shell"
```

2.5.3 Configuration

The shell adapter has no special configuration variables.

Stores

3.1 Memory

3.1.1 Setup

No setup necessary. Data pushed to the in-memory server will not persist between restarts.

3.1.2 Configuration

No additional configuration is required.

3.1.3 Usage

```
// blank import to register adapter
import _ "github.com/danryan/hal/store/memory"
```

3.2 Redis

3.2.1 Setup

The Redis store requires an available Redis server. Authentication and custom databases are not supported at this time. Please open an issue if you need this support!

3.2.2 Configuration

HAL_STORE

Set to `redis`

- Default: `memory`
- Example:

```
HAL_STORE=redis
```

HAL_REDIS_URL

The Redis server URL

- Default: `localhost:6367`

- Example:

```
HAL_REDIS_URL=redis.example.com:6379
```

HAL_REDIS_NAMESPACE

Set a namespace to prepend to all keys

- Default: `hal`

- Example

```
HAL_REDIS_NAMESPACE=foo
# sets all keys to "foo:<key>"
```

3.2.3 Usage

```
// blank import to register adapter
import _ "github.com/danryan/hal/store/redis"
```

Handlers

Appendices

- glossary