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Introduction

Some things to consider before you begin:

Gentoo is aimed towards advanced users, it requires a certain amount of prior experience. If this is your first encounter with Linux/Unix this distribution is most likely not what you want to use (for a mission-critical system).

People with prior experience in managing Linux/Unix-based systems and configuration of services (without a GUI!) should be safe.

Adding the overlay

Portage + Layman

You will need app-portage/layman-1.3.3 or higher (current stable (2010-08-03))

- Install layman

```
# Enable git useflag
echo 'app-portage/layman git' >> /etc/portage/package.use

# Verify layman version and useflags and install it
emerge -av layman
```

- Add freeswitch-overlay repository definition to list in "/etc/layman/layman.cfg"

```
#-------------------------------------------------------------
# URLs of the remote lists of overlays (one per line) or
# local overlay definitions
#
#overlays  : http://www.gentoo.org/proj/en/overlays/repositories.xml
#            http://dev.gentoo.org/~wrobel/layman/global-overlays.xml
#            http://mydomain.org/my-layman-list.xml
#            file:///usr/portage/local/layman/my-list.xml

overlays: http://www.gentoo.org/proj/en/overlays/repositories.xml
          http://oss.axsentis.de/files/layman/freeswitch-overlay.xml
```

- Fetch + list repositories

```
# Update and list all available repositories
layman -L
```

- Add freeswitch overlay

```
layman -a freeswitch
```

- Update "/etc/make.conf" to include the layman-managed repositories

```
# add this line at the end
source /var/lib/layman/make.conf
```

To update the overlay later:

```
layman -s freeswitch
```

Available packages & useflags

Several ebuilds in the overlay use so-called USE_EXPAND useflags, e.g. in portage's make.conf you can use:

```
FREESWITCH_MODULES="lua sofia"
```

which is the same as setting

```
USE="freeswitch_modules_lua freeswitch_modules_sofia"
```

Other (popular) examples of USE_EXPAND useflags are LINGUAS and VIDEO_CARDS.

NOTE: For more information on setting useflags: Setting useflags & keywords.

---

net-misc/freeswitch	
	The core FreeSWITCH package
USE flags	
nosamples	Do not install sample configuration files
sctp	Enable SCTP support in mod_sofia and OpenZAP
FREESWITCH_MODULES flags	
alsa	Alsa endpoint module (mod_alsa)
amr	AMR-NB (Narrowband) pass-through codec module (mod_amr)
amr_wb	AMR-WB (Wideband) pass-through codec module (mod_amrwb)
bv	Broadvoice HD (Wideband) codec (mod_bv)
cdr_csv	CSV (Comma-Separated-Value) CDR (Call-Detail-Record) module (mod_cdr_csv)
celt	CELT ultra-low delay wideband codec module (mod_celt)
cepstral	Cepstral SWIFT TTS (Text-To-Speech) engine module (mod_cepstral)
cidlookup	API commands to query CallerID lookup services (mod_cidlookup)
conference	Conferencing application (mod_conference)
console	Console logger module (mod_console)
curl	Curl-based HTTP client api command, replacing mod_http (mod_curl)
db	Database-based resource limit module (mod_db)
dialplan_asterisk	Asterisk-like dialplan module (mod_dialplan_asterisk)
dialplan_directory	Directory interface dialplan module (mod_dialplan_directory)

dialplan_xml	Default XML dialplan module (mod_dialplan_xml)
dingaling	Jingle (XMPP / GoogleTalk) endpoint module (mod_dingaling)
distributor	Distribute calls between multiple routes (mod_distributor)
dptools	Dialplan tools (mod_dptools)
easyroute	DB-based routing application module (mod_easyroute)
enum	ENUM application module (mod_enum)
erlang_event	Erlang event handler / remote control module (mod_event_erlang)
event_multicast	Multicast event handler module (mod_event_multicast)
event_socket	Socket event handler / remote control module (mod_event_socket)
expr	Dialplan expressions (mod_expr)
fax	(**deprecated >1.0.6**: see *spandsp*) Fax receive/transmit application module (mod_fax)
fifo	First-in-First-out call queue module (mod_fifo)
file_string	Stream audio from a file(?) (mod_file_string)
flite	Flite TTS (Text-to-Speech) module (mod_flite)
freetdm	FreeTDM (PRI, BRI, Analog) endpoint module (former OpenZAP) (mod_freetdm)
fsv	Simple video recording application (mod_fsv)
g723_1	G.723.1 codec module (mod_g723_1)
g729	G.729 (pass-through only) codec module (mod_g729)
gsmopen	GSM modem/handset endpoint module (mod_gsmopen)
h26x	H.261, H.263, H.264 pass-through codec module (mod_h26x)
hash	Hash-based resource limit module (mod_hash)
http	HTTP client api command (mod_http)
iax	Inter-Asterisk eXchange (IAX2) endpoint module (mod_iax)
ilbc	iLBC codec module (mod_ilbc)
java	Java language module (mod_java)
lcr	LCR (Least-Cost-Routing) application module (mod_lcr)
limit	(**deprecated >1.0.6** see *db*, *hash*, *redis*) Resource limit module (mod_limit)
local_stream	Local file streaming module (mod_local_stream)
logfile	File logger module (mod_logfile)
lua	LUA language module (mod_lua)
managed	.NET managed mode language module (mod_managed)
memcache	Memcache API interface module (mod_memcache)
nibblebill	Real-time debit module (mod_nibblebill)
opal	H.323 endpoint module based on the Opal library (experimental) (mod_opal)
openmrcp	OpenMRCP module (mod_openmrcp)
openzap	OpenZAP (PRI, BRI, Analog) endpoint module (mod_openzap)
osp	Open Settlement Protocol (OSP) module (mod_osp)
perl	Perl language module (mod_perl)
pocketsphinx	Pocketsphinx ASR (Speech-recognition) module (mod_pocketsphinx)
portaudio	Portaudio endpoint module (mod_portaudio)
portaudio_stream	Stream audio from a portaudio source (mod_portaudio_stream)

python	Python language module (mod_python)
radius_cdr	Radius CDR (Call-Detail-Record) module (mod_radius_cdr)
redis	Redis homepage])-based resource limit module (mod_redis)
rss	RSS feed application (mod_rss)
say_de	**deprecated**, see: *de* in the LINGUAS section below
say_en	**deprecated**, see: *en* in the LINGUAS section below
say_es	**deprecated**, see: *es* in the LINGUAS section below
say_fr	**deprecated**, see: *fr* in the LINGUAS section below
say_it	**deprecated**, see: *it* in the LINGUAS section below
say_nl	**deprecated**, see: *nl* in the LINGUAS section below
say_ru	**deprecated**, see: *ru* in the LINGUAS section below
say_zh	**deprecated**, see: *zh* in the LINGUAS section below
shell_stream	Stream audio from an external application (mod_shell_stream)
shout	Shoutcast streaming module (mod_shout)
silk	SILK wideband codec module (mod_silk)
siren	G.722.1 (aka "Siren") codec module (mod_siren)
skinny	SCCP endpoint module (mod_skinny)
skypiax	**deprecated**, see: *skypopen*
skypopen	Skype endpoint module, using the Skype client remote control API (mod_skypopen)
snapshot	Record sliding window (e.g. last 10 seconds) of audio (mod_snapshot)
sndfile	Module to add support for various sound file formats (mod_sndfile)
snom	SNOM VoIP phone helper applications (mod_snom)
sofia	SIP (Session-Initiation-Protocol) endpoint module (mod_sofia)
spandsp	VoIP codecs and FAX applications (mod_spandsp)
speex	Speex codec module (mod_speex)
spidermonkey	Spidermonkey javascript language module (mod_spidermonkey)
spidermonkey_curl	Spidermonkey curl extension (mod_spidermonkey_curl)
spidermonkey_core_db	Spidermonkey db extension (mod_spidermonkey_core_db)
spidermonkey_odbc	Spidermonkey ODBC extension (mod_spidermonkey_odbc)
spidermonkey_socket	Spidermonkey socket extension (mod_spidermonkey_socket)
spidermonkey_teletone	Spidermonkey tone detection/generation extension (mod_spidermonkey_teletone)
spy	Spy on a user constantly (mod_spy)
syslog	Syslog logger module (mod_syslog)
tone_stream	(Scriptable) Tone generator module (mod_tone_stream)
tts_commandline	System command TTS (Text-To-Speech) interface (mod_tts_commandline)
unimrcp	MRCP (Media Resource Control Protocol) ASR/TTS client module (mod_unimrcp)
valet_parking	Valet parking (mod_valet_parking)
vmd	Voicemail detect application module (mod_vmd)
voicemail	Voicemail application module (mod_voicemail)
voipcodecs	(**deprecated >1.0.6**: see *spandsp*) Collection of most-used codecs (G.711, G.722, G.726, GSM, LPC10) (mod_voipcodecs)
xml_cdr	XML CDR (Call-Detail-Record) module (mod_xml_cdr)

xml_curl	CURL XML Gateway module (mod_xml_curl)
xml_ldap	LDAP XML Gateway module (mod_xml_ldap)
xml_rpc	XML RPC module (mod_xml_rpc)
yaml	YaML (Yet-another-Markup-Language) dialplan module (mod_yaml)
zeroconf	Zeroconf event handler module (mod_zeroconf)
LINGUAS flags	
de	German TTS functions (mod_say_de)
en	English TTS functions (mod_say_en)
es	Spanish TTS functions (mod_say_es)
fr	French TTS functions (mod_say_fr)
it	Italian TTS functions (mod_say_it)
nl	Dutch TTS functions (mod_say_nl)
ru	Russian TTS functions (mod_say_ru)
zh	Simplified Chinese TTS functions (mod_say_zh)

net-misc/freeswitch-sounds

Sounds meta package

LINGUAS flags	
en_US	**deprecated**, use *en*
ru_RU	**deprecated**, use *ru*
en	English (Callie) sound files (*default*)
ru	Russian (Elena) sound files

net-misc/freeswitch-sounds-en/-ru/-de/-es

Sounds language package

Common USE flags	
16k	16KHz (Wideband) audio files
32k	32KHz (Ultra-Wideband) audio files
48k	48KHz () audio files

net-misc/freeswitch-music

Music package for MoH (Music-on-Hold)

USE flags	
16k	16KHz (Wideband) audio files
32k	32KHz (Ultra-Wideband) audio files
48k	48KHz () audio files

net-misc/mod_com_g729

Commercial G.729 codec module

USE flags

none

Installation

Setting useflags & keywords

In "/etc/make.conf":

```
# this is needed for the FREESWITCH_MODULES line to work
USE_EXPAND="FREESWITCH_MODULES"

# example: Custom settings for modules and sound file languages
#
# NOTE: Those lists are not incremental,
#       if you set these, you have to add _all_ modules you want to build!!
#       E.g. the example below would only build mod_sofia and mod_lua.
#
FREESWITCH_MODULES="sofia lua"
LINGUAS="en ru"
```

In "/etc/portage/package.use":

```
# example: enable resampler and sctp flags
#
net-misc/freeswitch resampler sctp

# example:
#
net-misc/freeswitch-sounds-en 16k 32k 48k
net-misc/freeswitch-sounds-ru 16k 32k 48k
net-misc/freeswitch-music     16k 32k 48k
```

TODO

Installing the packages

```
# check if everything is OK and install the package(s)
emerge -av freeswitch
```

TODO

Notes

Last edited by: Stkn 01:37, 20 January 2010 (UTC)