





GroundWork Monitor License Automailer Marketing and Support Training

GroundWork Galactic Headquarters
February 16, 2010

Course Outline

What the License Automailer Does

Installation

Operation

Email Output Format

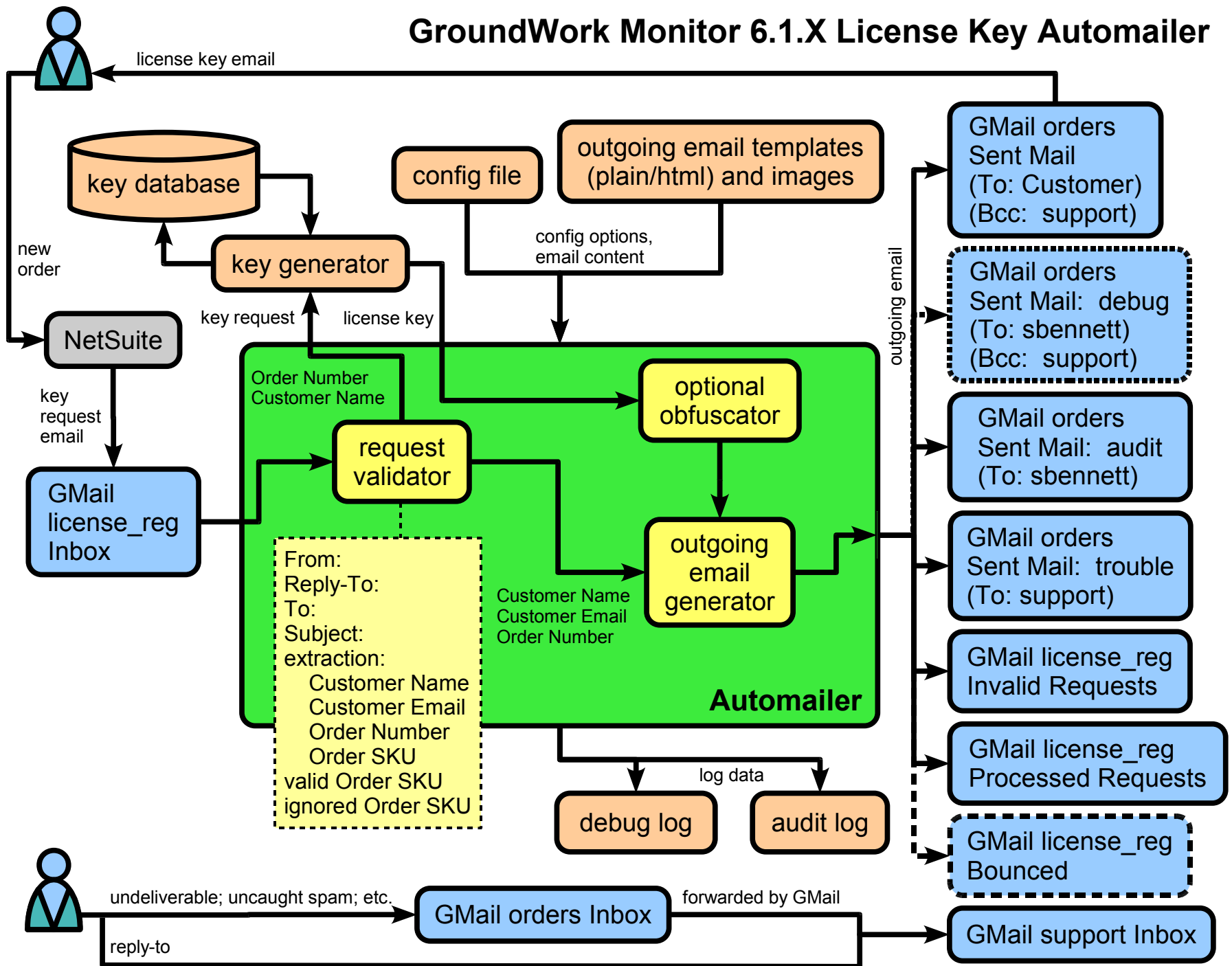
Audit Logging

Test Facilities

Troubleshooting

Futures

GroundWork Monitor 6.1.X License Key Automailer



Installation, Part I (GMail setup)

disable POP to incoming/outgoing email accounts

enable IMAP to incoming acct, disable to outgoing acct

- can still send via IMAP using outgoing account (weird mystery)

required folders will be created as needed by the scripting

work with Fikret so mail comes from gwos, not gwoslabs

forward email from the outgoing account to a secondary account, to catch bounces and notify the humans

mark undeliverable-email notices as not-spam for the support account, so they're not hidden away

Installation, Part II (automailer build)

check out code from Subversion (all in one directory)

- <http://geneva/groundwork-professional/trunk/licenseServer/automailer>

make tarball

- `generate_quickstart_license.tar.gz`

copy created tarball to install location

- production location: `lancy:/home/license/automailer/`
- production user: install and run as `license`

un-tar the tarball

make build; make clean

- creates Perl packages not found in OS-provided Perl libraries

Installation, Part III (automailer config)

edit config file

- `generate_quickstart_license.conf`
- lots of options, all documented in the config file

edit startup script

- `quickstart_automailer`
- set `automailer_path` value only, to reflect installation location

install the startup script cron job

- run as the same non-root user the package is installed as
- sample line in `generate_quickstart_license` script:
`*/5 * * * * /home/license/automailer/quickstart_automailer start`

Operation

startup script (`quickstart_automailer`) cron job will automatically start/restart the daemon (run every 5 minutes)

automailer processing cycle time typically set to 300 seconds (5 minutes)

- will process all available incoming requests in each cycle

handled input email is moved aside so it's not reprocessed

- bad requests are shuffled off to "Invalid Requests" folder
- good requests are moved to "Processed Requests" folder
- failed requests are left in "Inbox" folder for processing in next cycle

self-maintaining: debug log is automatically rotated

audit log grows forever

license key

where to plug into product

Subject: License key for your recent GWOS order #SO144
From: [GWOS Support <orders@gwos.com>](mailto:orders@gwos.com)
Reply-To: [GWOS Support](mailto:orders@gwos.com)
Date: 02/04/10 05:50 PM
To: gherteg@gwoslabs.com

From: [GWOS Support <orders@gwos.com>](mailto:orders@gwos.com)

Reply-To: [GWOS Support](#)

Date: 02/04/10 05:50 PM

To: gherteg@gwoslabs.com



Dear Customer,

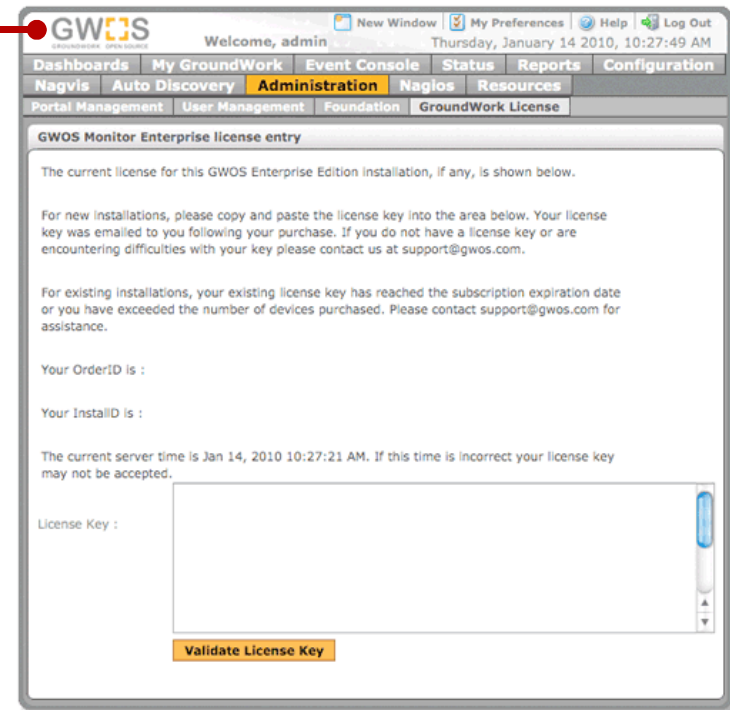
Thank you for your recent GroundWork Monitor Quickstart purchase (GroundWork order #SO144). We have attached the license key for your purchase below.

Your license key is:

```
Thu Feb 04 17:50:31 PST 2010
property_param_1=0123456789ABCDEF0123456789ABCDEF0123456789ABCDEF0123456789ABCDEF0123456789ABCDEF0
property_param_10=0123456789ABCDEF0123456789ABCDEF0123456789ABCDEF0123456789ABCDEF0
creationDate=0123456789ABC
startDate=0123456789ABC
property_param_9=01234567*Not for production*
property_param_8=0123456789ABCDEF0123456789ABCDEF0123456789AB*Not for production*
property_param_7=0123456789ABCDEF0123456789ABCDEF0123456789AB*Not for production*
property_param_6=012345*Not for production*
property_param_5=012345*Not for production*
property_param_4=0123456789ABCDEF0123456789ABCDEF0123456789ABCDEF0123456789ABCDEF01
property_param_3=01*Not for production*
property_param_2=0123456789AB*Not for production*
property_param_1=012345*Not for production*
property_orderID=01234
expiresAfterFirstRun=0123456789ABC
signature=0123456789ABCDEF0123456789ABCDEF0123456789ABCDEF0123456789ABCDEF012345678
expirationDate=0123456789ABC
property_param_12=0123456789ABCDEF0123456789ABCDEF0123456789AB*Not for production*
```

Please copy and paste this license key into your product in the screen shown below:

links to training materials



If you encounter difficulties getting up and running, please contact us at support@qgos.com. We're happy to assist.

Many of our customers find the following resources useful:

- [Migrating from Nagios to GroundWork Monitor](#) webcast
- [GroundWork University](#) training courses
- [GroundWork in an Hour](#) webcast tutorials

Best Regards,

GroundWork Open Source
139 Townsend Street, Suite 500
San Francisco, CA
tel: +1 415 992 4500
info@gwos.com

NOTICE: This email is intended only for the use of the party to which it is addressed and may contain information that is privileged, confidential, or protected by law. If you are not the intended recipient, you are hereby notified that any dissemination, copying, or distribution of this email or its contents is strictly prohibited. If you have received this message in error, please notify us immediately by replying to the message and deleting it from your computer. Thank You.

Email Output Format

text/plain (always) + text/html (optional, but standard)

- separate template files for plain and html parts
- templates have certain fields substituted with customer data and generated license key when outgoing email is created

image files are included, not referenced on the web

reply-to goes back to support, not to orders

blind copy sent to support

both plain and html parts are base64-encoded to avoid problems with possibly very long lines in license keys

- this encoding causes a problem with forwarding license-key email, as content appears mangled; reply and change address instead

Audit Logging

audit log location:

- `/home/license/logs/quickstart_license_issuance_log`
- fixed path survives version upgrades in `~/automailer/` directory

these fields are recorded for each successful key request:

- date/time of request processing
- order number
- order SKU
- customer name
- customer email
- request source (should always be from NetSuite now)
- network service hash

audit email sent for each successful or ignored valid request

- ignored requests are to be handled manually, not via automailer

Test Facilities

`generate_quickstart_license` command-line options:

- `-c file`: use an alternate config file (not likely, but available)
- `-d`: dump config-file entries (then stop) so you can see if they're being interpreted as you expect (use the options `-i -o -d`)
- `-i`: run interactively, not as a daemon; the most common way to run tests to process just a few requests
- `-o`: debug-log messages go also to standard output (easy to see)
- `-r`: process just one valid request, then stop
- `-s`: run just a single cycle, then stop

config-file options:

- enable debug target (don't send trial data to customer)
- key obfuscation (guard against valid keys escaping into the wild)
- logging debug level (usually set to INFO; can bump up to DEBUG)

Troubleshooting, Part I

take action when you receive trouble email

look at production setup

- log in as user `license` on `lancy`
- installation is in `/home/license/automailer/`
- debug log: `./logs/generate_quickstart_license.log`

debug level is set in config file

- `generate_quickstart_license.conf`
- DEBUG logging level will spill out extensive detail on actions taken

to bounce automailer after changing configuration:

- `quickstart_automailer restart`
- or (better), just let the active cron job start it within 5 minutes after:
`quickstart_automailer stop`

Troubleshooting, Part II

bogus requests are incoming messages with invalid headers

- we might sometimes receive mailing-list or spam messages
- the only email sent to `license_reg` should be valid requests
- other validation/processing failures generate different trouble email

pay attention to bounced email (sent to orders, forwarded to support)

- watch out: GMail/Postini may deflect it as supposed spam

look in `license_reg` “Invalid Requests” folder for all types of improper incoming email

requests can be reprocessed by just moving back to Inbox

- very useful in development testing, perhaps also in production fixes

Troubleshooting, Part III

key generator might fail

- most likely internal failure
- Roger is point-man for investigation / restart

`max_faults_since_trouble_email`

- config-file setting to count soft failures up to a limit before sending trouble email
- allows transient failures to pass unnoticed, while persistent failures do eventually generate a notification
- you will therefore see many more failures in the debug log than you got trouble email for

Futures

add back the Customer Name into the outgoing email

- personalize the email instead of generic “Dear Customer”
- NetSuite doesn’t currently provide a way to copy name into request
- we’re getting customer organization rather than name in request

email the entire audit log periodically to Simon

- to provide a backup of this data
- to allow him to analyze it in bulk

properly validate the customer email address

- the Email::Valid module is appropriate, but look at its bug-list first

validate the incoming order info against internal GW systems

- extra protection against attacks



www.groundworkopensource.com