GroundWork Monitor 6.0 Beta Enterprise Release Notes

The purpose of this document is to describe the contents of GroundWork Monitor 6.0 Beta Release. Please read this document completely before proceeding with installation. Please download the GroundWork Monitor 6.0 Beta Enterprise software from this URL: https://support.groundworkopensource.com/downloads. If you find a bug or encounter a problem using this release please help us by reporting the problem. Please include as much information as possible in bug reports including Operating system and browser versions. Bugs can be filed by opening a support case through your GroundWork Salesforce account or by sending an email to Beta-Feedback@gwos.com

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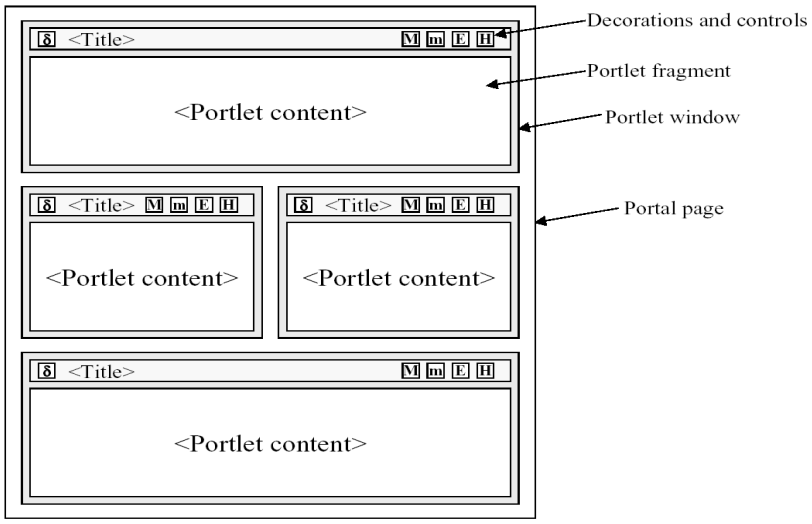
SECTION 1 – CHANGES FROM THE PREVIOUS RELEASE

GroundWork Monitor 6.0 includes transition the product to the JBoss Portal. The JBoss portal provides an open source and standards-based environment for hosting and serving a portal's Web interface, publishing and managing its content, and customizing its experience. It is entirely standards-based, and supports the JSR-168 Portlet Specification (Portlet 1.0) and JSR-286 Portlet Specification (Portlet 2.0) , which allows you to easily plug-in standards-compliant portlets to meet your specific portal needs. JBoss Portal consists of portals, portal containers, portal pages, and portlets. Here are some definitions:

- Dashboard: A personal portal page that allows users to customize their view of the portal. Users are able to copy other portal pages and individual portlets into their dashboard, drag-and-drop portlets on the dashboard to change the visual layout, and save their dashboard for use in future portal sessions.
- Portal: A web based application that aggregates content from different sources. A portal may have sophisticated personalization features to provide customized content to different users.
- Portal Page: A web page within a portal that displays an aggregation of portlets.
- Portlet: A web component that processes requests and generates dynamic content. Each portlet produces a fragment of HTML, used by a portal page to display its content.
- Portlet Instance: An active representation of a portlet. A single portlet may have one or more instances, each with a different configuration or state. Example: there may be multiple instances of an HTML Editor Portlet within a portal, each of which shows a different HTML page.
- Portlet Window: A section of a portal page that shows the content of an individual portlet with optional decorators, such as a title bar and frame. A portlet window may also have widgets for controlling the window's state (e.g. maximized, minimized) or configuring the portlet.



Do we still need this→ The install root for GroundWork Monitor remains /usr/local/groundwork/ in this release but many of the lower-level directories have changed to aid maintainability. Note the new locations of the following components:

Component	GroundWork Monitor 5.2.1	GroundWork Monitor 6.0
MySQL binary	/var/lib/mysql/bin/mysql	/usr/local/groundwork/mysql/bin/mysql
Database data	/var/lib/mysql/ibdata	/usr/local/groundwork/mysql/data/ibdata1
Java binary	/usr/java/jdk1.5.0_06/bin/java	/usr/local/groundwork/java/bin/java
Java home environment var.	$JAVA_HOME=/usr/java/jdk1.5.0_06	$JAVA_HOME=/usr/local/groundwork/java
Monarch code	/usr/local/groundwork/monarch	/usr/local/groundwork/core/monarch
Performance CGIs	/usr/local/groundwork/performance	/usr/local/groundwork/core/performance
Service and Host Profiles	/usr/local/groundwork/profiles	/usr/local/groundwork/core/profiles
Reports and Code = for Reports	/usr/local/groundwork/reports	/usr/local/groundwork/core/reports
Supervise scripts	/usr/local/groundwork/services	/usr/local/groundwork/core/services
Bookshelf data	/usr/local/groundwork/guava/packages/bookshelf	/usr/local/groundwork/core/guava/htdocs/guava/packages/bookshelf

The following locations are unchanged from GroundWork Monitor 5.X

GroundWork Monitor 6.0	Content
/usr/local/groundwork/foundation	Feeder scripts, Jetty and logs
/usr/local/groundwork/nagios	Plugins and configuration.
/usr/local/groundwork/config	GroundWork configuration files
/usr/local/groundwork/etc	Package configuration files

End_of_"Do we still need this"

The startup scripting has also changed in this release. All groundwork services are started by the following bootstrap script:

/etc/init.d/groundwork {start|stop}

This script may be called from the command line to control any component individually by specifying the component name on the command line. Example: restarting Nagios

/etc/init.d/groundwork restart nagios

Individual services (MySQL, Apache, gwservices) may be controlled by a separate control script. Example: stopping Apache Webserver

cd /usr/local/groundwork

./ctlscript.sh stop apache

./ctlscript.sh start apache

The same command can be used to start and stop gwservices, nagios, nsca and mysql.

GroundWork directories are no longer added to the system-wide linker configuration. This change was made to address incompatibilities between certain system libraries and the GroundWork equivalents. Plug-ins and other add-ons may explicitly set the LD_LIBRARY_PATH variable if access to the GroundWork libraries is required for their correct operation.

This version of GroundWork Monitor includes an optional component called Network Service that provides new features. The Network Service adds these capabilities:

- Provides GroundWork Monitor administrators with software update notifications in their home screen.
- Provides environment statistics to GroundWork about the GroundWork Monitor installation.

Enabling the Network Service is completely optional. Disabling it does not reduce the level of functionality or impair the usage of GroundWork Monitor other than update notifications are not received. The Network Service sends installation information back to GroundWork. The complete set of information gathered is:

- The type of GroundWork Monitor product installed (e.g. Community Edition and Enterprise) and version.
- The Operating System vendor and version and basic hardware information (RAM, CPU)
- The size of the monitored environment: number of configured hosts, host groups, service checks, users and service checks being used.

We hope GroundWork Monitor users will choose to share this information with us so that we can make product improvements and develop new features based on this type of aggregated, anonymous usage data.

SECTION 2 – INSTALLATION

Download the 32 or 64-bit binary from: https://support.groundworkopensource.com/downloads

Change the permissions of the binary to executable:

chmod +x groundworkenterprise-6.0-brXX-gwYY-linux-32-installer.bin

Installation Methods

The new binary installer package supports 3 modes: GUI, text, and unattended. The default is GUI if an X server is running; otherwise text mode will be used.

- GUI install - From a system with X server running, simply double-click on the bin file or go to the command shell and execute the downloaded file:

  ./groundworkenterprise-6.0-brXX-gwYYY-linux-32-installer.bin

- Text based install - From a command shell, execute the binary with the text-mode installation selected:

  ./groundworkenterprise-6.0-brXX-gwYYY-linux-32-installer.bin –mode text

- Unattended install - From a command shell, execute the binary with the unattended-mode installation selected:

  ./groundworkenterprise-6.0-brXX-gwYYY-linux-32-installer.bin –-mode unattended

- This will perform an unattended installation that will not prompt the user for any information.
- Passing the 'optionfile' command line option lets you specify installation options in a separate file. The option file should contain one line per option, using the format key=value. You can use any of the options accepted by the installer. For information, on valid options, execute the binary with the --help switch. For example, to use a mysql password specified in the options file:

  ./groundworkenterprise-6.0-brXX-gwYYY-linux-32-installer.bin --mode unattended --optionfile gwinstall.ini

- Where gwinstall.ini consists of:

  mysql_password=your_passwd

- Remote install - Using SSH into a remote server and then using the text based install (see above) is the most common way to install GroundWork Monitor remotely. If you perform the remote install from a machine that runs an X server, you can use ssh with the -X option and run the install with the GUI mode. Example:

  ssh -XC –l root target-machine

  ./groundworkenterprise-6.0-brXX-gwYYY-linux-32-installer.bin

- GroundWork Monitor will be installed into the /usr/local/groundwork directory. The location of some files has changed from previous releases as well as the way services are configured and launched and noted in the changes section above.
- Proxy Server Configuration - The Network Service will not be able to receive updates if a non-transparent proxy is used. To configure the proxy settings complete the following:

  1. First install the product and enable the Network Service during installation
  2. Login using a secure shell on the GroundWork server: cd /usr/local/groundwork/network-service/scripts/
  3. From the command line: ./network-service-ctl.sh stop

4. Now: cd /usr/local/groundwork/network-service/bin/agent.conf
5. edit agent.conf file and add the following:
   proxy_host=xxx.yyy.zzz.www
   proxy_port=pppp
6. Save your changes
7. Now restart the network service: ./network-service-ctl.sh start

SECTION 3 – UPGRADING FROM A PREVIOUS RELEASE

Before attempting to upgrade please read this complete section for important details of changes applied during the upgrade process.

Before you upgrade

Since GroundWork Monitor 6.0 uses a new file structure and is no longer based on RPM packages the following subscription+ packages need to be removed prior to a 6.0 upgrade:

groundwork-fping-feeder-3.0.5-3351.noarch.rpm

groundwork-perl-typedconfig-1.0.1-2813.noarch.rpm

groundwork-nsca-bulk-1.3.1-3356.noarch.rpm

After the installation of GroundWork Monitor the 6.0 compatible versions of these packages can be reinstalled.

Upgrading GroundWork Monitor is supported from the following product versions

GWMON 5.2.1 with SP-7

GWMON 5.2.x with NMS 2.1

GWMON 5.3

GWMON 5.3 with NMS 2.1.1

For assistance with upgrading from previous versions please contact GroundWork Support.

Important: Complete a full system and database backup prior to upgrading your installation as described in section 6.

To start the upgrade process follow the installation steps listed above. If an existing installation is detected an upgrade will be performed.

NOTE: Customers also installing the Network Management Suite (NMS) or one of the components of the suite must use NMS 2.1.1 for compatibility with GroundWork Monitor 5.3. Previous versions of NMS should not be installed with GroundWork Monitor 5.3

Additional details of the upgrade process

During the upgrade process the following files will be backed up and put into a backup-YYYY-MM-DD folder under /usr/local/groundwork

- Profiles
- nagios: archives and plugins
- Performance charting: saved views and rrd images
- Guava packages : all GroundWork packages
- Monarch: Automation files and monarch backups

During the upgrade process the following configuration and customizations are ported into the 6.0 installation:

- Guava Packages – Upgrading GroundWork Monitor 5.x to GroundWork Monitor 6.0 will not convert custom Guava applications (Wrappit). If the installer detects custom applications (guava packages), the packages will be saved into the following directory: /usr/local/groundwork/backup/guava.
- Guava Users – all 5.x users will be upgraded to 6.0. User passwords will be set to a preset default (e.g. "changeme"), which users will have to change upon first login, except for admin. This user passwd will remain the same as it was in the 5.x release.

- Guava Roles - all 5.x Roles will be upgraded to 6.0. The default roles of "Administrators" and "Operators") will always exist.
- Dashboards - Dashboards will be upgraded to 6.0, but only the user's default dashboard will be upgrade.

  The following dashboard widgets as they map from 5.X to 6.0
- HostGroup List Widget to Seurat Portlet
- Host List Widget to Host List Portlet
- Service List Widget to Service List Portlet
- Troubled Hosts Widget to Seurat Portlet
- Troubled Services Widget to Seurat Portlet
- Performance Graph Widget to Performance Measurement Portlet
- Tactical Overview Widget to Nagios Monitoring Portlet
- Console Widget to Event Console Portlet
- URL Widget to URL Portlet

Only one Seurat View portlet instance will be created for multiple "Troubled Hosts" and/or "Troubled Services" widgets. There is a 1-to-1 mapping of HostGroup Lists to Seurat View Portlets.

- Plugins not included by GWMON – plugins will be backed up during the upgrade and need to be added from the backup directory back to the libexec directory.
- Profiles: Any custom or modified profiles need to be transferred from the backup directory back to the original location after installation is complete.

The upgrade does not cover the following components:

- Plugins included by GWMON that have been modified by the customer on the system. These files will be overwritten with the GroundWork modifications during an upgrade.
- Profiles included by GWMON that have been modified by the customer on the system. These files will be overwritten with the GroundWork modifications during an upgrade.

All profiles and Nagios plugins from the libexec directory are saved into the groundwork/backup-YYYY-DD-MM directory before running the upgrade. For restoring any custom plugins or custom profiles after the upgrade please copy the files from the backup directory to the new location as described below:

Profiles:

- Backup directory: /usr/local/groundwork/backup-YYYY-DD-MM/profiles
- New location: /usr/local/groundwork/profiles
- Nagios plugins
- Backup directory: /usr/local/groundwork/backup-YYYY-DD-MM/nagios/libexec
- New location: /usr/local/groundwork/nagios/libexec

GroundWork Monitor 6.0 includes its own instance of MySQL and no longer relies on a MySQL instance already installed on the system. During an upgrade the GroundWork databases are moved to the new instance of MySQL as following

/var/lib/mysql to moved to /usr/local/groundwork/mysql/data

The previous MySQL instance will be turned off but not un-installed.

5.2 upgrades to 6.0 - For customers upgrading from 5.2.x to 6.0, please perform a Configuration commit after upgrade to ensure that all data objects have been synched with the Nagios, monarch and GWCollageDB databases.

Here are the steps to perform the Configuration Commit:

1. Login to GW 6.0 portal as admin
2. Select the Configuration portlet page
3. Select the Control subportlet page
4. Select the Commit link.

Nagios user home directory- the location of the nagios home directory and associated files has changed in the 6.0 release, to summarize:

1. For upgrades from 5.2.1 to 6.0, the nagios home directory will remain in the same location (/usr/local/groundwork/users/nagios) and not be removed.
2. For upgrades from 5.3 to 6.0 the nagios directory will remain in /home/nagios
3. For new installations the home directory for nagios will be located in /usr/local/groundwork/users/nagios|

Other files: For customers upgrading from 5.x to 6.0, the /etc/logrotate.d/groundwork file has been backed up and placed in a directory called /usr/local/groundwork/backup-$date/etc/logrotate.d/groundworkd.bak. If you have any customer logs is this file , please make sure to merge this file with the /etc/logrotate.d/groundwork file after upgrade(gwmon-6292)

MySQL Databases on a Different Partition

If the old MySQL database files were stored on a separate partition please follow these additional steps.

- Before upgrading ensure that the partition containing the GroundWork Monitor software is big enough to temporarily include the databases. The size of the databases is equal to the following files:

  /var/lib/mysql/ibdata1

  /var/lib/mysql/ib_logfile0

  /var/lib/mysql/ib_logfile1
- When the upgrade is run the database files are moved from /var/lib/mysql to /usr/local/groundwork/mysql/data
- After a successful upgrade please stop the GroundWork application /etc/init.d/groundwork stop
- Then copy the new database files under /usr/local/groundwork/mysql to the database partition and change the mount point to reflect the new location.
- Start the groundwork monitor application: /etc/init.d/groundwork start

During the upgrade the following files session and temporary files are removed from /tmp:

- PHP session files sess_*
- PHP temp file *.php

Please make sure that everybody is logged out from their Browser before starting the upgrade process.

SECTION 4 – KNOWN ISSUES AND LIMITATIONS

General

Here are a list of Known Issues and Limitations for the GroundWork 6.0 Release. The GWMON entry is an internal project key to track the known issues.

The following browsers will no longer be supported as of 6.0:

- Firefox 2
- Internet Explorer 6

The following applications have been removed from the GroundWork product line for the 6.0 release:

- Configuration of Log File Reports
- Log File Reporting system
- Profile Tools
- MIB Validator

The GroundWork portal is the only supported portal with the 6.0 release.

Customers installing Groundwork with VMware software, please advised to add “VMware tools” to this system. We have experienced that there VMware tools helps to resolved system clocking issues.

Selecting on the Export Data icon in Advanced Reports may result in an HTTP 404 error - GWMON-5716

Upon startup Apache may emit the following message “Could not reliably determine the server's fully qualified domain name.” One possible work-around for this issue is to edit the /usr/local/groundwork/apache2/conf/httpd.conf file to explicitly specify the hostname value - GWMON-2149

In rare instances during installation an erroneous message may be displayed that snmpttd and mysql services did not start - GWMON-5649 and 5650

Nagios Map does not work when loaded on the manufacturer supplied SuSE 64 bit installation. To work around this issue add the freetype and freetype2 libraries to the “Basic system with graphic libraries” OS installation option - GWMON-5989

Some non-alphanumeric characters used in passwords may cause authentication to fail in some configurations where an LDAP server is used to authenticate. This may be worked around by avoiding the use of these special characters - GWMON-6007

Database

While installing the GroundWork binary, the root password for MySQL should consist of alphanumeric characters - GWMON-5486

If an existing /etc/my.cnf file is found during installation it is left in place and the new MySQL configuration created in /etc/my.cnf.groundwork. It is highly recommended that these changes are manually merged into the existing /etc/my.cnf, in particular - GWMON-5231:

- max_connections = 125 <-- If you have more than 10 simultaneous users this number needs to be increased by 5 for every additional simultaneous user
- innodb_buffer_pool_size = 100M <-- Should be your current database size + 30% (database file in the previous releases is /var/lib/mysql/ibdata1)

Nagios

The configuration of Nagios has changed with this release to better support large installations. In particular the "use large installation tweaks" option is turned on, and all three of the related options turned off. (See the bottom of Nagios Main Configuration Page 2 in the product.) This configuration will be so for both a clean install and for an upgrade from a previous release. Some existing sites may have certain scripts that depend on the use of environment variables to pass information to scripts for checks, notifications, and event handlers. In such a case, either the scripts should be modified to pass all necessary macros on the command line, or the "enable environment macros" option should be enabled - GWMON-5798

Some features available in Nagios 3 cannot be configured using the Monarch interface:

- Group nesting including contact group nesting is not available; contacts and other object types may be selected and added to groups via the web interface.
- Host and service extended info have not been merged with the hosts.cfg and services.cfg files in this release.
- The ‘first notification delay’ setting is not exposed, use of this setting is not recommended.
- Custom configuration variables are not exposed via the web interface. The extended information fields may be useful to store additional data
- The setting of fractional notification and check intervals is not supported.

When importing an existing Nagios 3 configuration file in to GroundWork Monitor 5.3 the precache object file is used to drive the import process. As such the following limitations should be noted - GWMON-5880:

- Importing a Nagios 3 configuration file purges any existing configuration prior to import; hence any prior configuration not included in the configuration files will be lost.
- Service dependencies and host and service escalations are defined as templates not object instances. The particular instances of the service dependencies/escalations do show up in the precached objects file (e.g. “define servicedependency"), but they do not carry the name of the templates from which they were derived.
- When importing host and service escalation trees the original names may be lost. It is recommended that host and service escalations be reapplied after the import is completed.

When a user is given access to the native Nagios web pages their identity will be recorded as “nagiosadmin” This is a known limitation of the Single Sign-on mechanism used to wrap the Nagios pages - GWMON-5646

"Re-schedule the next check of this service" does not work with Nagios 3.0.6. – GWMON-6319

Configuration

When importing a service profile with the merge option the apply hosts or hostgroups option must also be selected in order for the services to also be added - GWMON-5816

The $HOSTADDRESS$ macro is not expanded when used in the Service Extended Info field. This is a known issue - GWMON-5360

There is a known issue within the configuration application (Monarch) the literal name “new” is not a valid service name and should be avoided. – GWMON-5421.

Using the option in Configuration application to Load -> with the 'Update” and “Purge All' option deletes all existing time periods - GWMON-5740

Event Console

Performance

When generating a performance graph between two time periods that are on the same day, this action results in a flat-line graph with no data. This is a known issue, to work around the issue specify a range that spans more than one day.- GWMON-4647

SECTION 5 – ANNOUNCEMENTS AS OF VERSION 6.0

As previously announced Novell SLES 9 is no longer a supported for GroundWork Monitor. Customers are advised to migrate to Novell SLES 10 for GroundWork Monitor 5.3

As previously announced GroundWork Monitor 4.5.11 is now end-of-life. Customers using this version are advised to contact GroundWork Support.

GroundWork Monitor 4.5.26 will reach end-of-life with the next release of GroundWork Monitor. Customers running this version are recommended to upgrade at this time.

SECTION 6 – SYSTEM BACKUP INSTRUCTIONS

The purpose of this appendix is to outline the recommended back up procedures to be completed before upgrading to GroundWork Monitor 5.3.0.

Custom Changes

It is recommended that a complete backup of /usr/local/groundwork be taken before upgrading. If this is not possible the following should be considered the bare minimum set of files to be preserved.

- Plugins: /usr/local/groundwork/nagios/libexec
- CGI graphs: /usr/local/groundwork/apache2/cgi-bin/graphs
- Eventhandlers: /usr/local/groundwork/nagios/eventhandlers
- SNMPTT configuration: snmptt.conf, snmptt.ini
- Custom syslog filters: syslog.conf, syslog-ng.conf
- Logrotate: logrotate.conf, any changes under /etc/logrotate.d
- Foundation configuration: foundation.properties
- NSCA configuration: nsca.cfg
- Distributed deployment configuration: MonarchDeploy.pm
- The contents of the ‘nagios’ user home directory
- The contents of the ‘nobody’ user home directory
- The last configuration file: /usr/local/groundwork/nagios/etc/config-last.log
- All modified apache configuration files

- The contents of /usr/local/groundwork/etc
- The contents of /usr/local/groundwork/backup
- The contents of /usr/local/groundwork/jobs

RRD Files and Current Nagios Configuration

Back up existing RRD files and your current Nagios configuration. This will create three TAR files in the current directory.

- tar cfz GWMON-xxx-rrd.tar.gz /usr/local/groundwork/rrd
- tar cfz GWMON-xxx-nagios.tar.gz /usr/local/groundwork/nagios/etc
- tar cfz GWMON-xxx-users.tar.gz /usr/local/groundwork/users

MySQL Databases

GroundWork recommends that all MySQL databases be backed up before upgrading. The upgrade procedure will migrate the databases to the latest version of GroundWork Monitor. Create a back up directory (e.g. /usr/local/backup-gwmon/) and enter the following commands to create the back ups:

- Monarch (Configuration)

  mysqldump -uroot monarch > /usr/local/backup-gwmon/monarch.sql
- Guava (Framework)

  mysqldump -uroot guava > /usr/local/backup-gwmon/guava.sql
- Dashboards (Guava Dashboard Config)

  mysqldump -uroot dashboard > /usr/local/backup-gwmon/dashboard.sql
- Foundation (Monitor Data)

  mysqldump -uroot GWCollageDB > /usr/local/backup-gwmon/GWCollageDB.sql
- Log Reporting

  mysqldump -uroot logreports > /usr/local/backup-gwmon/logreports.sql

GroundWork Configuration Files

- Monarch

  Back up the following files and folders before removing GroundWork Monitor and restore after the 5.3 installation.

  tar cfz GWMON-xxx-monarchbackup.tar.gz /usr/local/groundwork/monarch/backup

  tar cfz GWMON-xxx-performance_views.tar.gz /usr/local/groundwork/performance/performance_views
- If you have done custom work to these files back up the following:

  tar cfz GWMON-xxx-monarchcallout.tar.gz /usr/local/groundwork/monarch/lib/MonarchCallOut.pm

  tar cfz GWMON-xxx-monarchexternals.tar.gz /usr/local/groundwork/monarch/lib/MonarchExternals.pm
- If you have configured Apache for secure SSL authentication any HTTPS certificates need to be preserved (the directory of the HTTPS certificates may differ from the example below):

  tar cfz ssl-keys.tar.gz /usr/local/groundwork/apache2/conf/ssl.key
- Backup data collected by syslog-ng

  tar cfz GWMON-xxx-syslog-ng-data.tar.gz /usr/local/groundwork/var/log/syslog-ng