GroundWork Monitor 6.1 Release Notes for Enterprise Quickstart SuSE Powered Virtual Appliance

This document describes the contents of GroundWork Monitor Enterprise 6.1 Release. Please read this document completely before proceeding with installation or upgrade.

## Contents

SECTION 1 – CHANGES FROM THE PREVIOUS RELEASE

SECTION 2 – INSTALLATION

SECTION 3 – FIXED ISSUES SINCE RELEASE 6.0.1

SECTION 4 – KNOWN ISSUES AND LIMITATIONS

SECTION 5 – ANNOUNCEMENTS AS OF VERSION 6.1

SECTION 6 – ADDITIONAL INFORMATION

SECTION 7 – SYSTEM BACKUP INSTRUCTIONS

## SECTION 1 – CHANGES FROM THE PREVIOUS RELEASE

GroundWork Monitor Enterprise Release 6.1 includes the following feature highlights:

* Support for remote administration via SSH, RDP, VNC, HTTP and HTTPS directly from the status viewer host and service pages.
* Drill-through links from the event console to status viewer
* View status history and performance graphs for arbitrary time periods
* Arbitrary time periods when displaying performance graphs on dashboards
* Improved documentation for the Web Service APIs including each operation and input/output parameters.
* Create links to individual host groups, hosts, service groups and services for use in ticketing systems and notifications using the following formats:

|  |  |
| --- | --- |
| **URL Node Type** | **Format of URL for accessing Status Viewer** |
| Host Group | http://<server-name>/portal-statusviewer/urlmap?hostgroup=Linux%20Servers |
| Host | http://<server-name>/portal-statusviewer/urlmap?host=localhost |
| Service | http://<server-name>/portal-statusviewer/urlmap?host=localhost&service=local\_mysql\_database |
| Service Group | http://<server-name>/portal-statusviewer/urlmap?servicegroup=sg1 |

* Updated Nagios Core from 3.0.6 to 3.2.0 and resolved an intermittent problem with some links from Nagios UI pages. The change log from Nagios 3.0.6 to 3.2.0 can be found here: <http://www.nagios.org/development/history/core-3x>
* Performance improvements for configuration commit time and system responsiveness
* Over 100 bug fixes and minor changes

When installing or upgrading to release 6.1 customers and partners are required to provide a valid license key. License keys are available from GWOS and are delivered via email. Customers upgrading their production systems to release 6.1 are advised to ensure they have received their license key prior to their upgrade maintenance window.

## SECTION 2 – INSTALLATION

**Downloading GroundWork Monitor Enterprise**

Customers with an existing GWOS subscription may download this release from:

<https://support.groundworkopensource.com>

GWOS Quickstart customers may download the release from the GWOS Exchange (<http://www.gwos.com/exchange>) by logging in and navigating to the “My Account” then “Files” page.

**Installation**

The SUSE Powered Virtual Appliance can be run on a number of virtualization platforms. It is supported on VMware, and the following release notes pertain to a typical setup of the appliance.

**Getting started with a VMware ESX 3.5 example**

Some features of the Virtual Appliance will not be enabled by default. This sequence is typical of configuring a Virtual Appliance to work on ESX 3.5 servers.

1. Decompress the Virtual Appliance
2. Use the VMware converter to load the appliance files into ESX
3. For ESX 3.5, SLES 11 32-bit operating systems are supported, so you should change the settings on your appliance, and use the Options tab to select “Suse Linux Enterprise Server 11 (32-bit)” as your operating system.
4. Boot the Virtual appliance, and start the Console, so that you can interact with it from the command line.
5. Accept the EULA, and wait for the boot process to finish.
6. Follow the instructions on the screen to log in and change the root password.

7) Use the yast utility to configure the timezone. The default time zone is UTC. Optionally reconfigure NTP.

8) After NTP syncs the system to the new timezone, restart the groundwork services:

service groundwork stop

rm /usr/local/groundwork/nagios/var/nagiosstatus.sav

service groundwork start

This will make all the timestamps in the interface reflect your local time.

9) For this release of 6.1, VMware tools 3.50-153875.i386.rpm is installed once the user sets a new password. This is sufficient for validating GroundWork Monitor however the VMware Tools package may be upgraded by following the instructions provided by VMware for your product. Please consult the known issues section for additional advice if upgrading VMware tools..

GroundWork Monitor includes all prerequisites and components within a single installation package. Since this virtual appliance is built using the 32-bit version of SLES and GroundWork Monitor this image cannot make use of more than 4GB of RAM.

The software components of GroundWork Monitor are installed under /usr/local/groundwork with the exception of the log rotation configuration and the start/stop script named /etc/init.d/groundwork. It is used as follows:

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

This script can also be used to restart individual services. For example:

/etc/init.d/groundwork restart nagios

**Login Access to Portal**

For the GW Monitor 6.1 release, there are three users and roles that are provided with a new installation. These users are: admin, operator and user. To login, use the same login name for the password. For example, to login as the user “operator”, the password is operator. Changing the default passwords upon installation is recommended.

The “admin” user is a specially privileged user. It is used in the creation of shared dashboards, and should never be deleted. It may be disabled if desired. The admin user, with the administrator role has access to all of the portlets. The other two users will have access to subset of the available portlets.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature** | **Administrator Role** | **Operator Role** | **User Role** |
| Dashboards | Yes | Yes (read-only) | Yes (read-only) |
| My GroundWork | Yes | Yes | Yes |
| Event Console | Yes | Yes |  |
| Status Viewer | Yes | Yes | Yes (no actions) |
| Reports | Yes |  | Yes |
| Configuration | Yes |  |  |
| Auto-discovery | Yes |  |  |
| Administration | Yes |  |  |
| Nagios | Yes | Yes |  |
| Resources | Yes | Yes | Yes |

At first login, the admin user must copy-and-paste their license key into the portal application under Administration, GroundWork License. Each license is valid for the subscription duration purchased. Each GWOS installation has a single license file that controls access to the application user interface. The license file affects only user access to the GWOS portal; it does not affect the ability to start/stop application components or the data gathering, processing or notification features of the solution. License key validity is checked at user login and is affected by:

* The subscription start and end-date
* The number of monitored devices configured
* Network Service is enabled

## SECTION 3 – FIXED ISSUES SINCE RELEASE 6.0.1

This section summarizes the minor issues fixed since release 6.0.1

|  |  |  |
| --- | --- | --- |
| **Key** | **Component/s** | **Summary** |
| GWMON-8209 | Dashboards/ My GroundWork | Dashboards, MyGroundWork : Edit preferences- Host Status Summary Portlet (HostSummaryInstance) values are not updated correctly |
| GWMON-8207 | Configuration | Stack trace after executing an Auto Discovery |
| GWMON-8204 | Configuration | Monarch commit generates an error after commit -- Error executing /usr/local/groundwork/core/monarch/bin/nagios\_reload (Not a directory) |
| GWMON-8202 | Performance | Auto-refresh in Performance Viewer yields Forbidden message |
| GWMON-8197 | Nagios | Nagios - Tactical Over View - select Outages link |
| GWMON-8196 | Nagios | Nagios - Process Info subpage -- selecting a nagios command link fails |
| GWMON-8195 | Nagios | Nagios - Service Problem - select View History For all hosts link |
| GWMON-8194 | Nagios | Nagios - Nagios Notifications Report - press the update button generates permission error |
| GWMON-8193 | Nagios | Nagios - Nagios Availability Report - create a report generates permission error |
| GWMON-8192 | Nagios | Nagios - Nagios - Nagios StatusMap subpage - select Update button -- generates permission error |
| GWMON-8191 | Nagios | Nagios - Nagios Events subpage - select Update button -- generates permission error |
| GWMON-8190 | Nagios | Nagios - Comment subpage -select the host/service comment link |
| GWMON-8189 | Nagios | Nagios - Host subpage - select a host -- generates permission error |
| GWMON-8188 | Nagios | Nagios - Nagios Trend Report - create a report generates permission error |
| GWMON-8187 | Nagios | Nagios - select an object from tactical overview page -- generates permission error |
| GWMON-8184 | Status Viewer | Service Statistics in Status Viewer --> Entire Network view are out of sync after trying to access the Unknown Pop Up |
| GWMON-8160 | Nagios | Additional security checks for access to Nagios UI |
| GWMON-8147 | Status Viewer | Null pointer exception in status viewer |
| GWMON-8145 | Status Viewer | Selecting any host and then clicking on Entire network takes the user to License key validation screen |
| GWMON-8141 | My GroundWork | Availability portlet re-render wrong time filter graph while frequently change time filter |
| GWMON-8132 | Status Viewer | Overview not updated on poll in large configurations |
| GWMON-8131 | Plugins | Check\_procl.sh does not work on Ubuntu platforms |
| GWMON-8126 | Status Viewer | First Detected timestamp sometimes reflects a time after Last Detected timestamp in Status Viewer |
| GWMON-8125 | BitRock | Executing a commit on 64bit EE Ubuntu - outputs nagios errors |
| GWMON-8122 | Console | 'Device' name of host changes to '127.0.0.1' after selecting the respective event row. |
| GWMON-8118 | My GroundWork | Custom-date-time selection displays wrong data in host availability portlet if both host and service availability portlets are added to dashboard |
| GWMON-8117 | Status Viewer | Pop-ups on info portlets not getting displayed on clicking any link |
| GWMON-8110 | My GroundWork | MyGroundwork> pop-up's appear distorted in host info portlet on clicking any link |
| GWMON-8098 | Status Viewer | Availability portlet gets confused with state changes between noon and 1pm |
| GWMON-8087 | Upgrades | Upgrade from 5.3 PRO to 6.1 EE->HTTP Status 500 - on login page as no jbossportal db after upgrade |
| GWMON-8086 | Upgrades | Upgrade from 5.3 PRO to 6.1 Ent->shows ERROR 1118 (42000) at line 976 in file: '/usr/local/groundwork/core/migration/migrate-gwcollagedb.sql': Row size too large |
| GWMON-8085 | BitRock | Need to add version patch for perl IO module from CPAN |
| GWMON-8081 | BitRock | Include mod\_ldap & mod\_authnz\_ldap modules |
| GWMON-8075 | BitRock | Error on importing/uploading few profiles |
| GWMON-8074 | Foundation | HostStatusProperty.StringValue buffer is too small to hold a large number of cacti graph URL's |
| GWMON-8062 | Status Viewer | Nagios monitoring portlet - host group view - is taking time to update status (Notifications) |
| GWMON-8059 | Console | Create cross links between events in the Event Console and corresponding Status Viewer pages |
| GWMON-8054 | Configuration | Monarch Deploy of linux child server; build instance groups - not working in new build 6.0.1 |
| GWMON-8052 | Status Viewer | Last notification is displayed as unavailable in status viewer |
| GWMON-8051 | Auto Discovery | Auto-discovery automation scheme match task detail-"Host profile:" displays list of services instead of host profiles. |
| GWMON-8049 | Dashboards | Portlet display name for Service Summary portlet should be changed from "Host Status Summary Portlet" To "Service Status Summary Portlet" |
| GWMON-8047 | Foundation | Monarch Foundation Sync can take a significant amount of time on a loaded system |
| GWMON-8045 | Status Viewer | Removing the acknowledgement should NOT remove the service comment that was originally associated with the acknowledgement. |
| GWMON-8043 | DassMonarch | Dassmonarch.pm does not provide a method to run externals. |
| GWMON-8042 | DassMonarch | MonarchStorProc.pm-> host\_profile\_apply() does not apply host externals. |
| GWMON-8036 | Configuration | Duplicate key '65535' for 1 error when processing perfdata |
| GWMON-8030 | Auto Discovery | User cannot set auto-discovery automation scheme match task detail to assign a particular service |
| GWMON-8029 | Status Viewer | User should not be able to add already existing services to the servicegroup, it gives error in log |
| GWMON-8019 | Console | ERROR [com.groundworkopensource.webapp.console.ConsoleManager] Invalid Dynamic property set for a public filter is displayed on clicking on some public filters |
| GWMON-7960 | Status Viewer | Validation message is shown on 2 locations -Comment portlet |
| GWMON-7690 | Configuration | Odd text in Monarch pre-flight, Commit screens |
| GWMON-6319 | Nagios | Nagios: "Re-schedule the next check of this service" does not work |
| GWMON-6194 | Configuration | Perfconfig-snmp-aix.xml and perfconfig-snmp-hpux.xml profiles contain references to the specific host |
| GWMON-6101 | Performance | Incorrect Date range shown on graph on creating Performance View for a host and data set combination across an extreme date range |
| GWMON-5180 | Nagios | There is no icon for "View extra services Notes" |
| GWMON-2108 | Plugins | Ssh\_mysql\_engine and ssh\_mysql\_database serve the same purpose, ssh\_mysql\_database needs to be removed |
| GWMON-1965 | Plugins | There are two service checks local\_mysql\_engine\_nopw and local\_mysql\_database\_nopw which give same output |

## SECTION 4 – KNOWN ISSUES AND LIMITATIONS

This section summarizes several common issues and limitations. If you are experiencing issues with GroundWork Monitor, you may want to read this section to see if your issue is a know limitation. Often there is a work-around for known issues. Contact support if you do not see your issue or an adequate work-around described.

1. The virtual appliance has been supplied with the compiler and kernel headers needed to complete the VMware tools installation. Type:

vmware-config-tools.pl

to start the process. You may accept all the defaults.

1. One of the advantages of VMware tools is the vmxnet network driver, which provides significantly higher performance than the default pcnet32 driver. This driver will not load automatically on SLES 11 32 bit virtual machines in ESX 3.5. To enable this driver, you must first shut down the appliance, and then edit the file that defines the virtual machine on the ESX server. By default, this file is called:

groundwork-6.1-br139-gw494-SLES.vmx

Though the file name may be different, if you decided to overwrite the name of the virtual appliance on conversion, or if you are installing a later revision.

The location of this file is dependent on your ESX implementation. You must access the ESX console machine, and cd to:

/vmfs/volumes/esxserver:storage1/groundwork-6.1-br139-gw494-SLES

and edit the .vmx file. Note that your exact path will depend on your ESX implementation and the name of the virtual appliance.

In this file, you will add the lines:

ethernet0.virtualDev = "vmxnet"

ethernet0.features = "15"

just after the line:

ethernet0.present = "true"

NOTE: You MUST have selected the operating system in the Options tab of the VMware virtual machine if you wish to follow this procedure! If you do not do this step, it is likely your virtual machine will not boot, and instead give you a “Missing Operating System” message.

NOTE: This procedure has been tested on ESX 3.5, where it was observed to work. It does not work with VMware Fusion 2.0.3. Your mileage may vary.

1. Restart the appliance after saving this file.

During installation of the SuSE VM on some servers and laptops, the gwservices process will reported fail to start from the console. This is a known timing issue with this process. The process has been started and can be verified in by logging in to the server by URL and/or searching of the java process using the ps utility.

32-bit Linux can address up to 4GB of RAM, however many modern computers have more. This can be addressed with 64-bit Linux, or with 32-bit Linux using a PAE kernel. Java has multiple problems starting and running under PAE kernels. GroundWork in particular will not run well at all in this configuration, and so is not supported. Customers requiring more than 4GB of RAM are recommended to use the 64-bit installation package on a 64-bit Linux OS in preference to this virtual appliance.

Please be advised that GroundWork does not currently support number formats that use a comma "," to separate whole numbers from decimals instead of a period "." - GWMON-8088.

Using the FireFox browser, when a user opens up the Status Viewer portal page, then opens a new tab with the Event Console portal page, the Event Console portal page does not receive PUSH updates from the GroundWork server. This situation is not occurring with the IE browser. Here are some suggestions to workaround this situation: Open up Event Console portal page first, then open up a new Status Viewer portal browser tab or open up the "Event Console" portal in a "New Window". In both cases, the events get pushed to both applications – GWMON-7990.

Upgrading from 6.1 Community Edition to 6.1 Enterprise, the Auto Discovery “Discovery Definition” is not properly upgraded. Customers who upgrade from CE to EE and wish to bring in the upgraded version of the discovery schema can follow this simple procedure:

In the Community version of the discovery schema, rename the Nmap TCP discovery method to "Nmap TCP Community" and the SNMP discovery method to "SNMP Community". Now a new discovery schema can then be created with the following settings:

name: GroundWork-Discovery-Pro

description: Basic discovery for GroundWork Monitor Professional, using Nmap TCP and SNMP

automation schema: GroundWork-Discovery-Pro

control type: Interactive

template: GroundWork-Default-Pro

This will create the Pro version of the discovery schema, and bring in the Pro versions of the Nmap TCP and SNMP discovery methods. Any local customization that the site has done to the old setup (e.g., a local community string in the SNMP discovery method) can then be applied – GWMON-7922.

Upon startup Apache may emit the following message “Could not reliably determine the server's fully qualified domain name.” This is not normally a cause for concern, but can be corrected if desired. 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.

If an existing /etc/my.cnf file is found during installation, it is left in place. It is highly recommended that the contents of this file are manually merged with the /usr/local/groundwork/mysql/my.cnf file, and the /etc/my.cnf be removed.

In order to have wave audio files enabled with the GroundWork installation, the nagios/share/media directory was exposed in the apache httpd.conf in order to allow audio wav files to be played when they are configured in the nagios/etc/cgi.cfg file.

The following should be added to /usr/local/groundwork/apache2/confg/httpd.conf:

ScriptAlias /nagios/cgi-bin "/usr/local/groundwork/nagios/sbin"

<Directory "/usr/local/groundwork/nagios/sbin">

Alias /nagios/media "/usr/local/groundwork/nagios/share/media"

<Directory "/usr/local/groundwork/nagios/share/media">

# Uncomment for Guava Single Sign On

AuthType Basic

require valid-user

# The following line should be change to specify the default page for invalid access attempts to this directory

TKTAuthLoginURL http://localhost:80/monitor/index.php

TKTAuthCookieName nagios\_auth\_tkt

TKTAuthTimeout 0

The monitoring performance portlet may display zero values when first opened. After a short delay the correct information will be shown. – GWMON-7819

Rarely the “Error occurred when processing action command” is seen when using the status viewer actions. If you encounter this problem, use the retry button to resubmit the request. – GWMON-7518

Automatic update does not occur in event console in response to “acknowledge” actions – GWMON-7824.

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

When using the IE8 browser in the configuration application some controls on the left-side panel may not display. This issue can be worked around by adding the GroundWork Monitor server to the Local Intranet Zone within IE8.

Following a commit operation it may take 60-90 seconds for the configuration change to propagate through to the other application components including the status viewer and event console applications.

**Additional minor known issues**

|  |  |  |
| --- | --- | --- |
| **Reference** | **Component** | **Summary** |
| GWMON-2996 | Configuration | Host group downtime can not be deleted |
| GWMON-4977 | Installer | Installer shouldn't assume it can write to current working directory |
| GWMON-5265 | Plugins | Check\_cpu sar out input incorrect on RedHat |
| GWMON-5491 | Console | Console All Events view does not differentiate between Nagios alerts and notification messages. |
| GWMON-5675 | Reports | Top Five report gets top five only on maximum value saved over the period |
| GWMON-5716 | Reports | HTTP ERROR: 404 on exporting data in Advanced Reports. |
| GWMON-5843 | NMS | Admin role on NMS child interface should not have access to any configuration applications |
| GWMON-6182 | Portal | Non-US language versions of groundwork cause INVALID DATE STRING exceptions when special chars in date string |
| GWMON-6485 | Configuration | Can't use the Multiple Instances feature of a service check where the check command has no arguments |
| GWMON-7086 | Console | Renaming a host does not update hostnames of new events |
| GWMON-7220 | Portal | Repeated "Network Connection Interrupted" error |
| GWMON-7455 | Configuration | Uploading Group resource macros fails and removes existing configuration |
| GWMON-7632 | Dashboards | Event portlet can not be configured for host, service, servicegroup |
| GWMON-7742 | Reports | All host groups host groups status report contains incorrect information |
| GWMON-7755 | Configuration | Monarch groups do not honor contact group assignments (host/host templates) |
| GWMON-7628 | My GroundWork | With user's login, My Groundwork->Configure page should not have Event portlet |
| GWMON-7889 | Administration | Creating different roles with same display names gives HTTP Status 500 error |
| GWMON-7898 | Console | Two messages show up as one in Console |
| GWMON-7994 | Configuration | Possible to define service twice on single host |
| GWMON-8007 | Status Viewer | Add a facility to close all "open" Status Viewer sub-tabs except the current one |
| GWMON-8048 | JBoss Portal | Adding portal pages outside of Sub-pages to the Dashboards page do not allow inheritance of Admin preferences |
| GWMON-8111 | BitRock | setenv.sh breaks when PATH contains "groundwork" but environment is not set properly |
| GWMON-8134 | My GroundWork | Time filter applied on availability portlets are not retained if edit preference on other portlet is clicked |
| GWMON-8200 | Configuration | Extended Host Info Data Disappears |

## SECTION 5 – ANNOUNCEMENTS AS OF VERSION 6.1

As previously announced, Groundwork Monitor versions 5.0.x are now end-of-life. Customers using these versions are advised to contact GroundWork Support. As previously announced Firefox 2 and Internet Explorer 6 are no longer supported as of release 6.0.

## SECTION 6 – ADDITIONAL INFORMATION

**ABOUT THE NETWORK SERVICE**

This version of GroundWork Monitor includes the Network Service component. This component provides the following capabilities:

* Provides GroundWork Monitor administrators with software update notifications in their home screen.
* Provides environment statistics to GroundWork about the GroundWork Monitor installation
* Provides the license key hash to GroundWork for each GroundWork Monitor installation

The Network Service communicates with servers in the checkforupdates.com domain every 12 hours via HTTPS (port 443.) All communication is initiated by the GroundWork Monitor Enterprise server.

The complete set of information sent to GWOS is:

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

If you need to enable the Network Service on an existing GroundWork Monitor Enterprise installation execute the following binary as the root user:  
  
/usr/local/groundwork/network-service/bin/network-service-manager.bin

**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:

First install the product and enable the Network Service during installation.

Login using a secure shell on the GroundWork server; cd /usr/local/groundwork/network-service/scripts/ or from the command line: .

/network-service-ctl.sh stop

cd /usr/local/groundwork/network-service/bin/

edit agent.conf file and add the following:  
proxy\_host=xxx.yyy.zzz.www  
proxy\_port=pppp

Save your changes.

Now restart the network service:

./network-service-ctl.sh stop

./network-service-ctl.sh start

## Obtaining Source Code

GroundWork Monitor includes Open Source software. The source for these packages is available for download from the following location: <ftp://archive.groundworkopensource.com/pub/groundwork-core/>



Modifications to these software projects in source form, are available for download from the following location:  
<http://archive.groundworkopensource.com/groundwork-opensource/>



## SECTION 7 – SYSTEM BACKUP INSTRUCTIONS

This section outlines the recommended back up procedures to be completed before upgrading to GroundWork Monitor 6.1

**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. Here are the upgrade procedures to 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*-YYYYMMDD-HHMMSS*.sql

Guava (Framework)

mysqldump -uroot guava > /usr/local/backup-gwmon/guava*-YYYYMMDD-HHMMSS*.sql

Foundation (Monitor Data)

mysqldump -uroot GWCollageDB > /usr/local/backup-gwmon/GWCollageDB*-YYYYMMDD-HHMMSS*.sql

Log Reporting

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

GroundWork Configuration Files

Monarch

Back up the following files and folders before removing GroundWork Monitor and restore after the 6.1 installation.

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

tar cfz GWMON-xxx-performance\_views.tar.gz /usr/local/groundwork/core/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/core/monarch/lib/MonarchCallOut.pm

tar cfz GWMON-xxx-monarchexternals.tar.gz /usr/local/groundwork/core/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