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Stratusphere™ FIT & Stratusphere™ UX

Upgrading from

6.0 (P1) to 6.0 (P2)

Introduction

This guide has been authored by Liquidware to provide a step by step guide to upgrade from Stratusphere 6.0 (P1) to 6.0 (P2).

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Overview

This document is meant for Stratusphere Administrators who need to perform an upgrade of their existing Stratusphere 6.0 (P1) to the latest 6.0 (P2) version. Prior versions of Stratusphere appliances cannot be upgraded through the Web UI to the latest 6.x version due to underlying operating system related upgrades.

The existing 5.8.5 or higher version CID Keys and Network Stations already deployed will continue to function and upload data to the new Stratusphere 6.0 (P2) appliances. The CID Keys, in turn, could be configured to auto-upgrade themselves to the 6.0 version through a simple configuration option within the Administration Web UI. The 5.8.5 or higher Network Stations cannot be upgraded to 6.0 Collectors but are still compatible with Stratusphere 6.0 Hubs and can be replaced in a phased manner. New Stratusphere Collector appliances would have to be deployed to take advantage of the highly scalable architecture of Stratusphere 6.0.

Normally, depending on whether your Stratusphere appliances have direct access to the Internet or not, Liquidware Labs provides 2 options for upgrades. However, all users should upgrade using the offline upgrade instructions in the **Upgrading Offline for Firewall Isolated Stratusphere Appliances** section. From a computer that has access to the Internet, you will need to download a single upgrade image file first, then upload it to the Stratusphere Hub appliance using the Web UI within the Administration section under the Hub Administration > Upgrades tab.

Please refer to the order in which appliances need to be upgraded below as well. If you encounter any errors, use the **Troubleshooting** section at the end of this release section.

Order of Upgrading Stratusphere Appliances

Beginning with Stratusphere 6.0, the high-level process for upgrades is as follows:
1. The user stops services on all existing Stratusphere 6.0 CID Key Collectors through each Collector appliance command line console.
2. The user navigates to the **HUB ADMINISTRATION > UPGRADES** tab within the **ADMINISTRATION** section within the Web UI or login to the Hub Console. Once logged in, the user initiates an upgrade that automatically does the following:
    a. Halts all services on the Hub,
    b. If there is a separate Database appliance attached:
        i. Upgrades the database appliance
        ii. Reboots it.
    c. The Hub then upgrades and reboots itself in an automated operation.
2. If **ENHANCED SECURITY** is enabled on the Database appliance, the user executes a command on the database appliance console.
3. The user then needs to upgrade the Collector Appliances using the command line console. The Collectors will reboot themselves once upgraded.

It must be noted that Liquidware considers legacy 5.8.x Network Stations to be disposable appliances. In any event, when you want to replace legacy Network Stations with 6.0 Collector appliance, OR where some Collectors don't upgrade, they can be powered off, then deleted from the Web UI, and a brand-new 6.0 Collector appliance can be downloaded and installed in its place with the same IP Address, hostname, and DNS names. Please make sure the legacy Network Station is deleted from the Web UI, prior to trying to add a replacement 6.0 Collector with the same network configuration and host name back to the Stratusphere installation.

Upgrading Offline or Firewall Isolated Stratusphere Appliances

Preparation

- The following section applies specifically to Stratusphere appliances running **6.0.0 ONLY**. If your appliances are on an earlier version like 5.8.x, please refer to the *Migrating from 5.8.5 or Higher to 6.0 Appliances* documentation. Apply the following instructions on each **6.0.0** appliance in order.
- Please acquire administrative credentials to the Stratusphere Web UI, Hub, and Database consoles for the 'friend' and root superuser accounts.
- On a local desktop with access to the Internet, please download the Stratusphere 6.0 upgrade image by clicking on the following link: http://download.liquidwarelabs.com/stratusphere/releases/stratusphere-6.0.0.img file.
- Liquidware strongly recommends using the online **Stratusphere Sizing Guide** to resize your Stratusphere appliances appropriately and prevent any chances of **data loss**.
- Power down your Stratusphere Hub and Database appliances.
- Edit the appliance settings for each appliance and update them based on the Stratusphere Sizing Guide recommendations.
- Take a snapshot of the Hub and Database appliances.
- Now, power up your Stratusphere Hub and Database appliances.
- Liquidware strongly recommends keeping the local appliance consoles of the Stratusphere Hub, Database, and Collector open during the upgrade process. It is helpful because the user can observe the upgrades running on the console status screens, observes when the appliance reboots, and when it up and running.

Pause Collectors

- If there are Collector appliances deployed within your environment reporting to this Stratusphere Hub, please open a command line console to the Collector. On each Collector appliance console:
  - Log into the console using '`friend`' and '`sspassword`' as default credentials.
  - Switch to the root using '`su –`' and '`sspassword`' as default credentials.
  - Execute the following command:
    `/sbin/sv stop tnt-backend tnt-backend-priv servicemix`
  - Leave these consoles open, as we will come back to them to upgrade the Collectors to the latest version.

Download Update

- Log into the **ADMINISTRATION** section of the Stratusphere Hub Web UI.
  - Navigate to the **HUB ADMINISTRATION > UPGRADES** tab.
  - If your Stratusphere Hub is isolated from the Internet within a secure, air-gapped environment the Hub is in offline mode. It will display a page with a BROWSE or CHOOSE FILE button depending on your browser. Click the BROWSE or CHOOSE FILE button to navigate to the location where the `stratusphere_6.0.0.img` file is stored, select it, and open it.
  - Click on the **UPLOAD UPDATE** button. On clicking, a blue progress bar with the message "**UPLOAD IN PROGRESS (THIS MAY TAKE SEVERAL MINUTES)**" will be displayed. The upgrade image is now being uploaded to the Hub. This is a ~1.1GB file, so depending your network connection it will take some time to upload this large file.
  - Once finished uploading, a green progress bar with the message "**DOWNLOAD COMPLETED. VERIFYING IMAGE.**" will be displayed. Here the Hub is verifying the integrity of image file uploaded. Once verified, it will

display "**UPLOAD COMPLETED SUCCESSFULLY**" at the top of the page. Click the 'x' at the extreme right to dismiss this message.

Update Database

- If the default password (`sspassword`) for `friend` or `root` users have been changed on the Database Appliance, do the following on the Database Appliance console window, otherwise skip this section and continue to the **Update Hub** section:
  - Log into the command line console of the Database Appliance using User ID: `ssconsole` and Password: `sspassword` as credentials.
  - Enter option U for the '`U) Update Software Menu`' option.
  - Enter option S for the '`S) Software Update Site`' option.
  - The update site should be set to the Stratusphere Hub IP or DNS such as `https://Hub.IP.or.DNS/upgrades/latest`. Hub.IP.or.DNS needs to be the actual IP or DNS of the Stratusphere Hub. If it does NOT match and is still pointing to `http://download.liquidwarelabs.com/upgrades/yum/` then press Y and edit it to match `https://Hub.IP.or.DNS/upgrades/latest` and hit, ENTER. It will update the site and ask again if you want to make a change – press N and ENTER to finish. If it matches, press N and ENTER to proceed.
  - Enter option C for the '`C) Check for Updates`' option.
  - If there are updates available, enter option U for the '`U) Update`' option to apply the update on the appliance.
  - Use the Q option to return to the previous menu and select 6 for the '`6) Reboot Server`' option if it is not scheduled automatically.
  - Once the appliance reboots, give it a few minutes to start all required services. Proceed to the next step within the browser of Stratusphere Web UI.

Update Hub

- From the **HUB ADMINISTRATION > UPGRADES** tab in the **ADMINISTRATION** section of the Stratusphere Hub Web UI:
  - Click the **INSTALL UPDATE** button to now install the 6.0.0 upgrade on the Stratusphere Hub. The UI will display a green progress bar with the message "**INSTALL IN PROGRESS (THIS MAY TAKE SEVERAL MINUTES)**". The update is being installed now.
  - If this installation of Stratusphere has a Database Appliance attached with default password (`sspassword`) for the `friend` and `root` users, the Hub will automatically upgrade the Database Appliance to 6.0.0 and reboot it as well. The Hub will then upgrade itself and reboot.
- When the install is complete, the UI will display the following message "**STRATUSPHERE IS BEING UPGRADED AFTER WHICH THE HUB WILL BE REBOOTED. YOU WILL BE LOGGED OUT IN 10 SECONDS. PLEASE WAIT AT LEAST 15 MINUTES TO LOG BACK IN.**" The user will be logged out of the Web UI automatically. Please wait for at least **10-15 minutes** before trying to refresh the Stratusphere Web UI Login page as the appliance reboots itself.
- Refresh the Login page of the Web UI and verify if the Hub displays "Version: 6.0.0" on the left in the bottom blue ribbon. Check the Web UI for standard functionality and if all looks well, delete the snapshot taken prior to starting the upgrade.

If ENHANCED SECURITY was Enabled on Hub or Database Appliances

- If ENHANCED SECURITY was enabled on the Hub and/or the Database appliances, please execute the following on the command line console of the Database appliance, else skip to the Update Collectors section below:
    - Log into the console using 'friend' and 'sspassword' as default credentials.
    - Switch to the root using 'su -' and 'sspassword' as default credentials.
    - Execute the following command:

      `/opt/tnt/etc/iptables-filter && /sbin/iptables-save -t filter >/etc/sysconfig/iptables`

    - Log out of the command line console by entering CTRL+D twice.

Update Collectors

- On each of the Collector consoles that we opened in the steps above, perform the following:
    - Log into the console using 'ssconsole' and 'sspassword' as default credentials.
    - Enter option U for the 'U) Update Software Menu' option.
    - Enter option S for the 'S) Software Update Site' option.
    - The update site should be set to the Stratusphere Hub IP or DNS such as `https://Hub.IP.or.DNS/upgrades/latest`. Hub.IP.or.DNS needs to be the actual IP or DNS of the Stratusphere Hub. If it does NOT match and is still pointing to `http://download.liquidwarelabs.com/upgrades/yum/` then press Y and edit it to match `https://Hub.IP.or.DNS/upgrades/latest` and hit, ENTER. It will update the site and ask again if you want to make a change – press N and ENTER to finish. If it matches, press N and ENTER to proceed.
    - Enter option C for the 'C) Check for Updates' option.
    - If there are updates available, enter option U for the 'U) Update' option to apply the update on the appliance.
    - Use the Q option to return to the previous menu and select R for the 'R) Reboot Server' option if it is not scheduled automatically.
    - Once the appliance reboots, give it a few minutes to start all required services.
- Log into the **ADMINISTRATION** section of the Stratusphere Hub Web UI.
    - Navigate to the **COLLECTOR ADMINISTRATION > COLLECTORS** tab.
    - Verify if each Collector now is at 6.0.0 version.
- Upgrade is now complete.

Troubleshooting

No new data from CID Keys after the upgrade
- o Please make sure the Collectors have been upgraded and have rebooted.
- o If the Collector appliances did not reboot themselves, please reboot them as we paused their services prior to beginning the update.
- o Verify each Collector's version number by logging into the **ADMINISTRATION** section's **COLLECTOR ADMINISTRATION > COLLECTORS** tab.

SCP fails to log into the appliance
- o The Stratusphere appliance is a security hardened appliance. If Enhanced Security is enabled, it has policies whereby passwords will expire after a certain amount of time. An expired password may be preventing the user from logging into the appliance.
- o Log into the local command line console and it will prompt you to change and update your password immediately. Once updated, you should be able to use the SCP tool again to upload files to the appliance.

Warning message "Please select a file to upload" while uploading file in offline mode
- o The browser may have cached some of the code and thus may not be running the latest version of the page. Please log out of the UI, clear the cache in the browser, and start over. If the problem persists then depending on your browser do the following:
  - ▪ In Firefox, right-click anywhere within the yellow warning message bar and choose THIS FRAME -> RELOAD FRAME menu option.
  - ▪ In Chrome, right-click anywhere within the yellow warning message bar and choose RELOAD FRAME menu option.
  - ▪ In Internet Explorer, right-click anywhere within the yellow warning message bar and choose REFRESH menu option.

Hub upgraded but there are some errors while using the Web UI
In most cases, the default password (`sspassword`) for the `friend` or `root` users may have been changed on the Database Appliance, thus causing the connection failures between the Hub and Database.
- o Log into the command line console of the Database Appliance using User ID: `ssconsole` and Password: `sspassword` as credentials.
- o Enter option U for the 'U) Update Software Menu' option.
- o Enter option S for the 'S) Software Update Site' option.
- o The update site should be set to the Stratusphere Hub IP or DNS such as `https://Hub.IP.or.DNS/upgrades/latest`. Hub.IP.or.DNS needs to be the actual IP or DNS of the Stratusphere Hub. If it does NOT match and is still pointing to `http://download.liquidwarelabs.com/upgrades/yum/` then press Y and edit it to match `https://Hub.IP.or.DNS/upgrades/latest` and hit, ENTER. It will update the site and ask again if you want to make a change – press N and ENTER to finish. If it matches, press N and ENTER to proceed.
- o Enter option C for the 'C) Check for Updates' option.
- o If there are updates available, enter option U for the 'U) Update' option to apply the update on the appliance.
- o Use the Q option to return to the previous menu and select R for the 'R) Reboot Server' option if it is not scheduled automatically.
- o Once the appliance reboots, give it at least **10-15 minutes** to start all required services.

Getting Help with Stratusphere

If you have questions or run into issues while migrating or using Stratusphere, Liquidware is here to help. Our goal is to provide you with the knowledge, tools, and support you need to be productive.

Using Online Resources

Liquidware maintains various kinds of helpful resources on our Customer Support Portal. If you have questions about your product, please use these online resources to your full advantage. The Support Portal includes product forums, a searchable Knowledge Base, documentation, and best practices among other items. You can visit our website at http://www.liquidware.com/.

Contacting Support

If you wish to contact our Support staff for technical assistance, please either log a request on the Liquidware Customer Support Portal or give us a call. Prior to Logging a Case you may want to review these helpful tips:

- Check the Product Documentation included with your Liquidware Product.
- Try to see if the problem is reproducible.
- Check to see if the problem is isolated to one machine or more.
- Note any recent changes to your system and environment.
- Note the version of your Liquidware product and environment details such as operating system, virtualization platform version, etc.

To speak directly with Support, please use the following numbers:

Toll Free in USA & Canada: 1-866-914-9665

International: + 1-678-397-0460