VOSS Insights
Dashboard and Arbitrator Maintenance and Upgrade Guide

Release 25.3

December 03, 2025

Legal Information

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Contents

1. Upgrade and Maintenance

This topic covers the upgrade of Dashboard, Arbitrator and DS-9, as well as maintenance tasks such as *DS9 Database Password Management*.

1.1. Pre Checks

1. Verify your access to the UI, then verify the application version via the profile menu (your username), for example, **admin** (top right).
2. Verify available storage of the disk of the server, via system/stats dashboards.

1.2. Backup VM Before Upgrade

If the application is a Virtual Machine (VM), then a pre-upgrade snapshot is recommended.

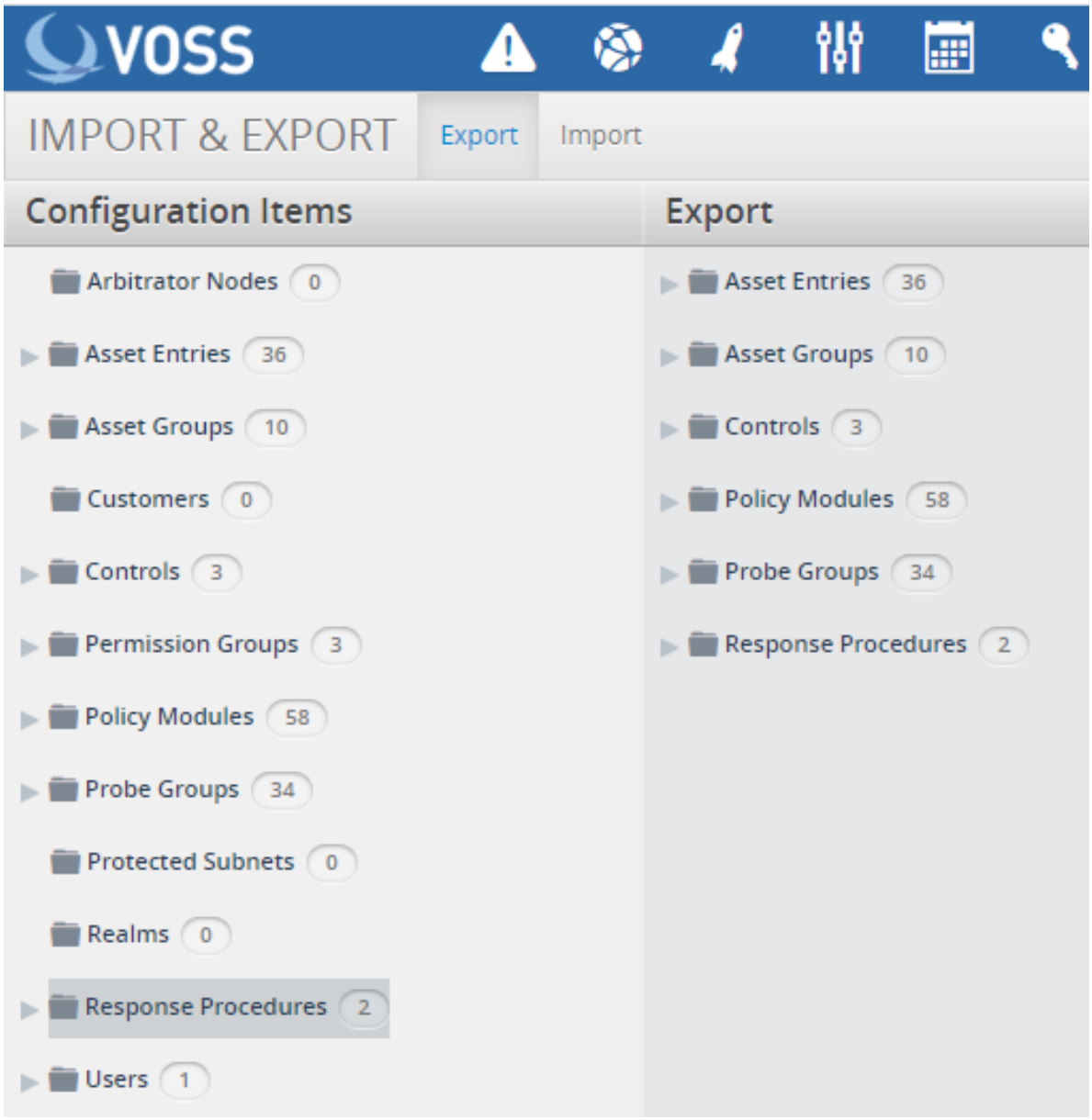
1.3. Backup Dashboards Before Upgrade

This procedure backs up dashboards before you start the upgrade.

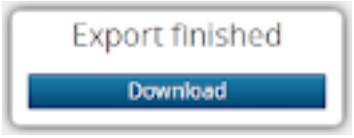
1. Log in to the Dashboard user interface as admin (superuser).
2. Click on the **System Configuration** icon (Cog), then select **Import/Export Wizard**.
3. On the **Export** tab, select all the dashboards.
4. Select all the dashboards.
5. Click the **Export .lxtr** button on the top right.
6. Click **Download**.
7. Save the file to your local computer or to a secure network location.

1.4. Backup Arbitrator Before Upgrade

1. Log in to the Arbitrator user interface as admin.
2. Click on the **System Configuration** icon (Cog), then select **Import**/**Export**.
3. Drag the following items from the **Configuration Items** pane to the **Export** pane:
    - Asset Entries
    - Asset Groups
    - Controls
    - Policy Modules
    - Probe Groups
    - Response Procedures

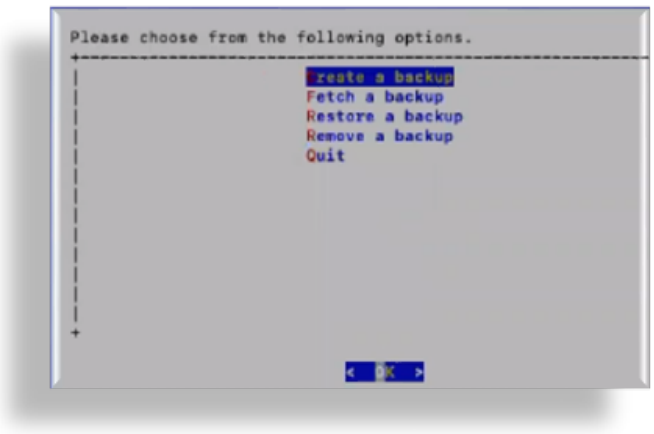


4. Click **Export**
5. Click **Download**, then save to your local computer or a secure network location.



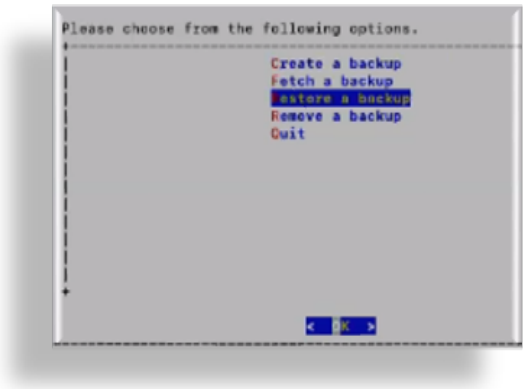
1.4.1. Admin Menu Backup (Arbitrator or Dashboard)

1. Log in to server using *Putty* via the admin account.
2. Go to the **Administration** menu (either Arbitrator or Dashboard).
3. Select **Backup Restore**, and then choose **Create a backup**.

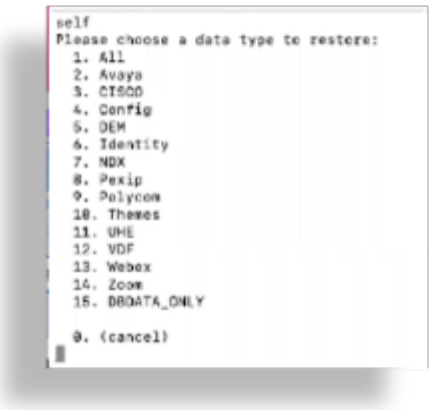


Note:

- This backup creates a backup `tar.bz2` file in the `lxt_archive/` directory. If required, the **Administration** menu can be used to restore a selected backup.



- Any themes that were present on the system are also backed up and will also be available from the restore list.



1.5. Upgrade

1.5.1. Upgrade Timings

Note:

- The total upgrade time depends on how busy the system is.
- Large databases and Microsoft Teams results will extend the Arbitrator upgrade time.

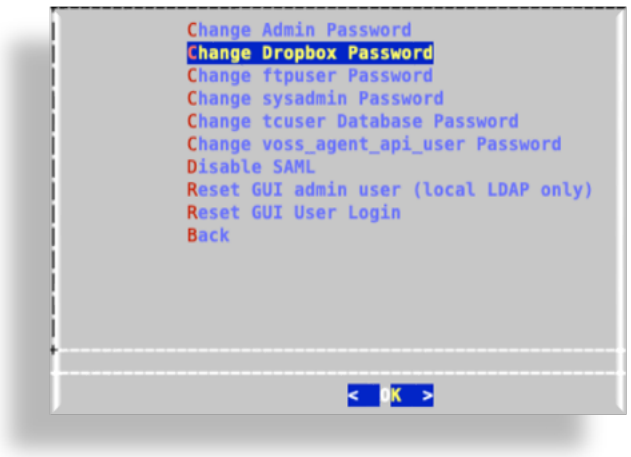
Averages:

- Arbitrator, Dashboard, DS9 = Approx 20-40 Mins

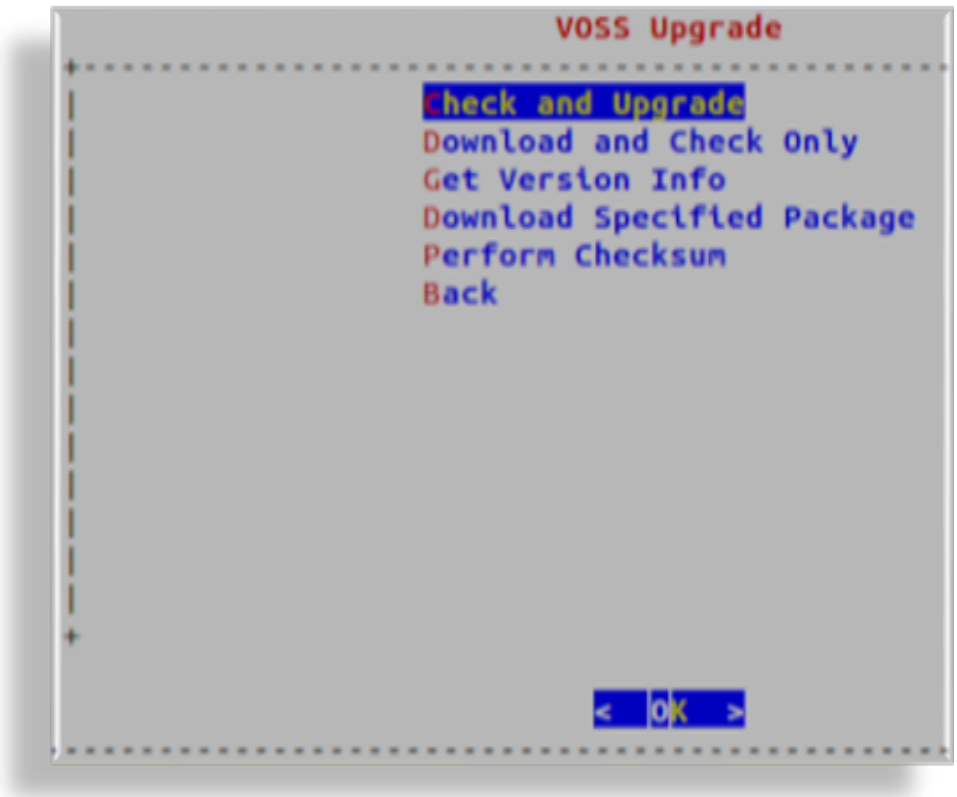
1.5.2. Upgrade Arbitrator or Dashboard

1. Using *Winscp* and the drop account, copy the file (example file for the arbitrator `insights-arbitrator-<from>-<to>.lxsp`) to the `lxt_upgrade` directory.

   Note: The drop account username is “drop”. You can set the password via the **Administration** menu.



2. Log in to the server using *Putty* via the Admin account.
3. From the **Administration** menu, select **Upgrade**.
4. On **VOSS Upgrade**, select **Check and Upgrade**, click **OK**.



1.5.3. Upgrade DS9

This procedure upgrades DS9.

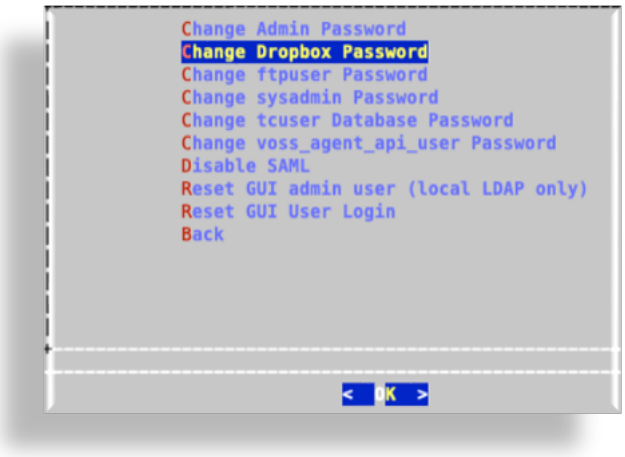
Pre-requisites:

- Using *Winscp* and the drop account, copy the `*.lxsp` file to be used for the upgrade into the drop account's *lxt_upgrade* sub-directory.

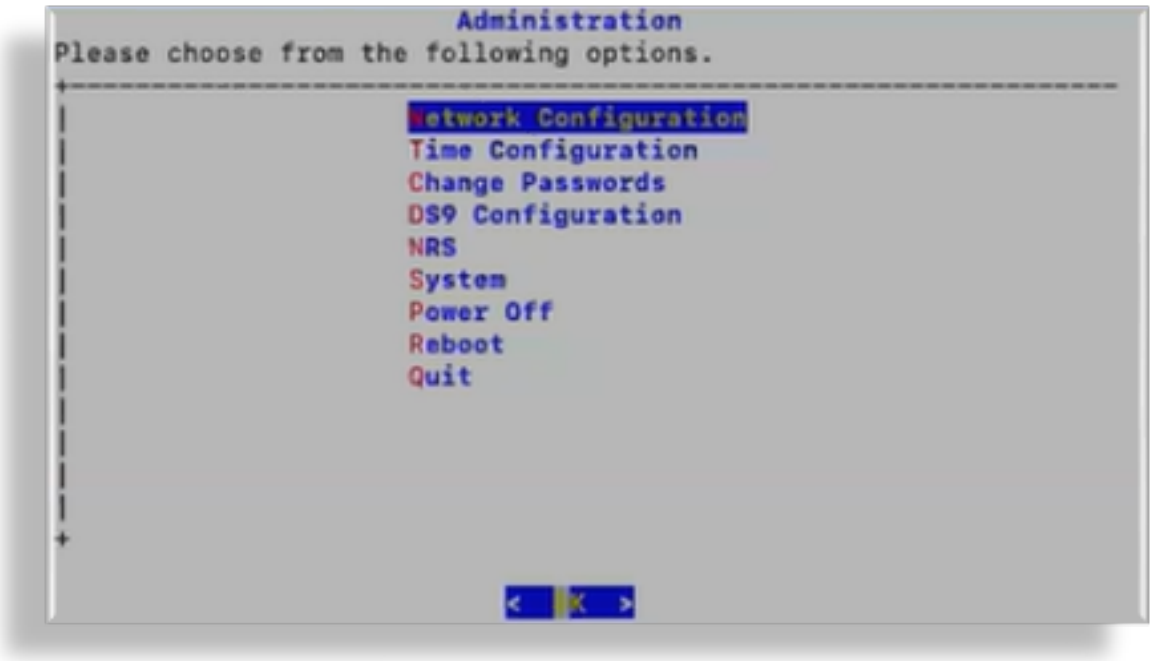
  Note:

  – The naming convention for Insights upgrade files means that the system is able to detect the file to use for the upgrade. For Insights products, `*.lxsp` file is copied into the drop account's *lxt_upgrade* sub-directory, and the system fetches the file from that location.

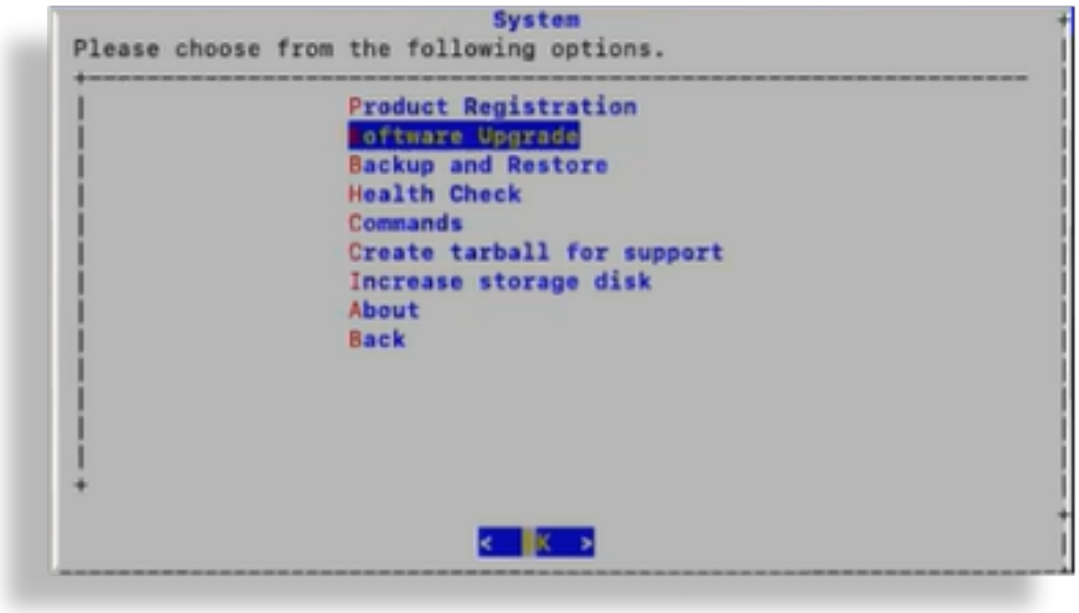
  – The drop account username is "drop". You can set the password via the **Administration** menu.



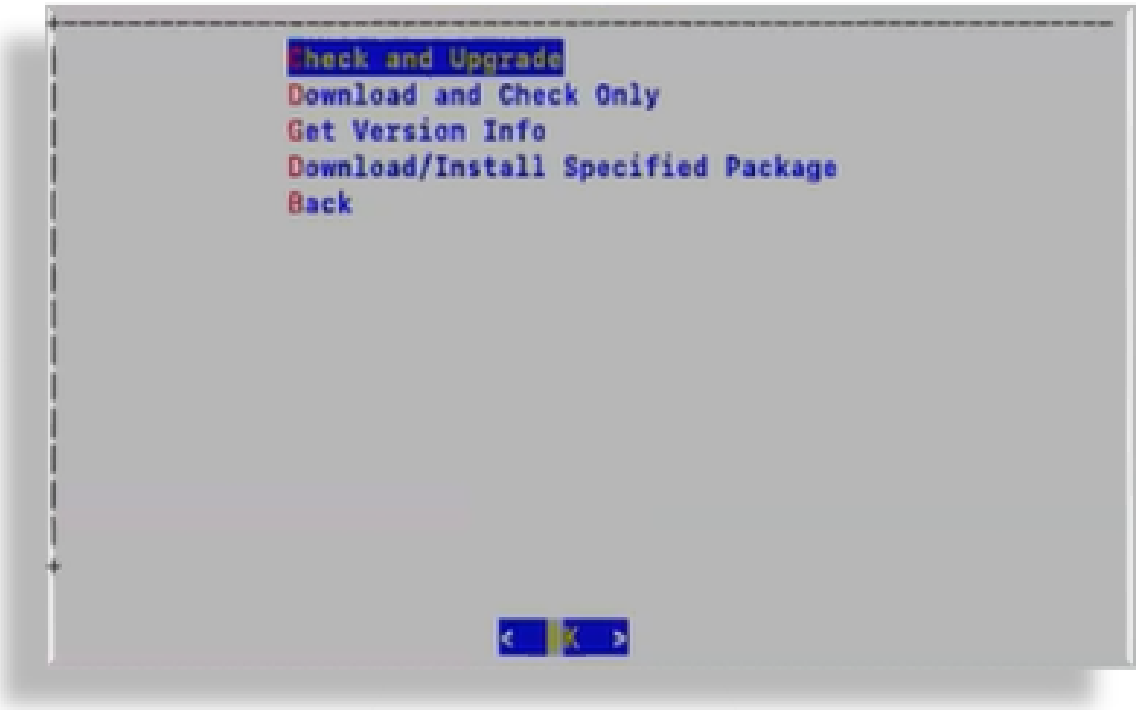
1. Connect to the DS9 server using an SSH client on port 22 and login using the admin credentials to access the **Administration** menu.



2. Select **System > Software Upgrade**.

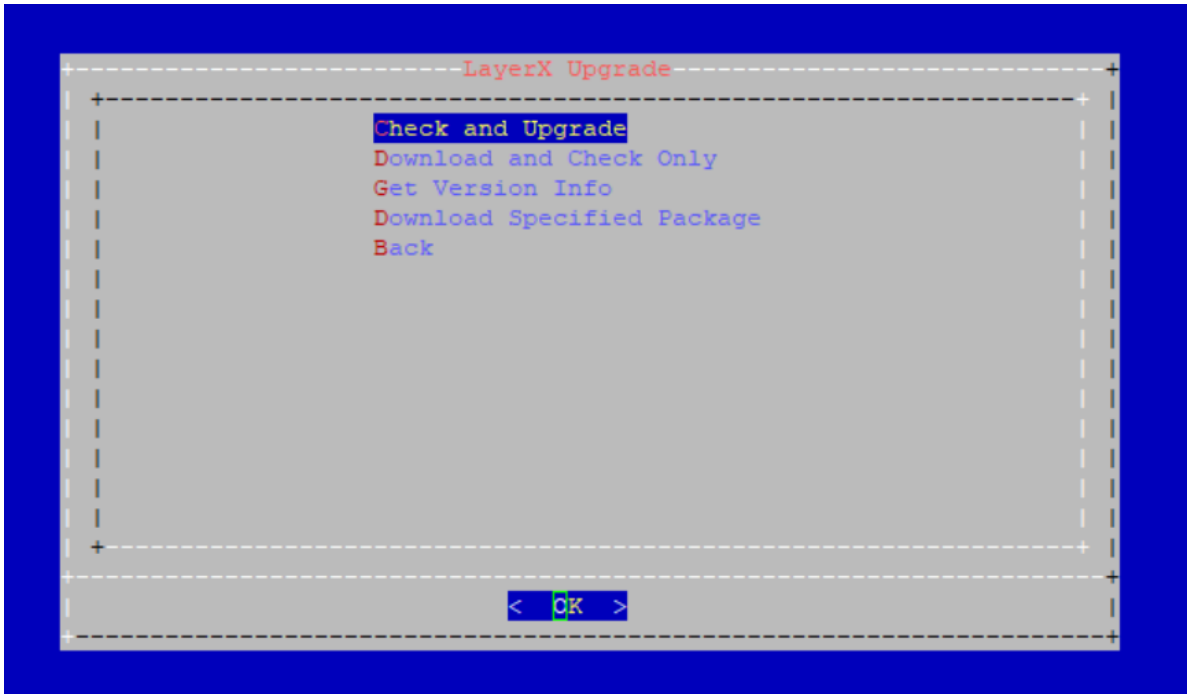


3. Select **Check and Upgrade**.



1.6. Patch Install Steps

1. Using *Winscp* and the drop account, copy the file (example file for the arbitrator `insights-arbitrator-<from>-<to>.lxsp`) to the `lxt_upgrade` directory.
2. Log on to the server using *Putty* and the admin user credentials
3. From the **Administration** menu, select **Upgrade**
4. Select **Check and Upgrade**:

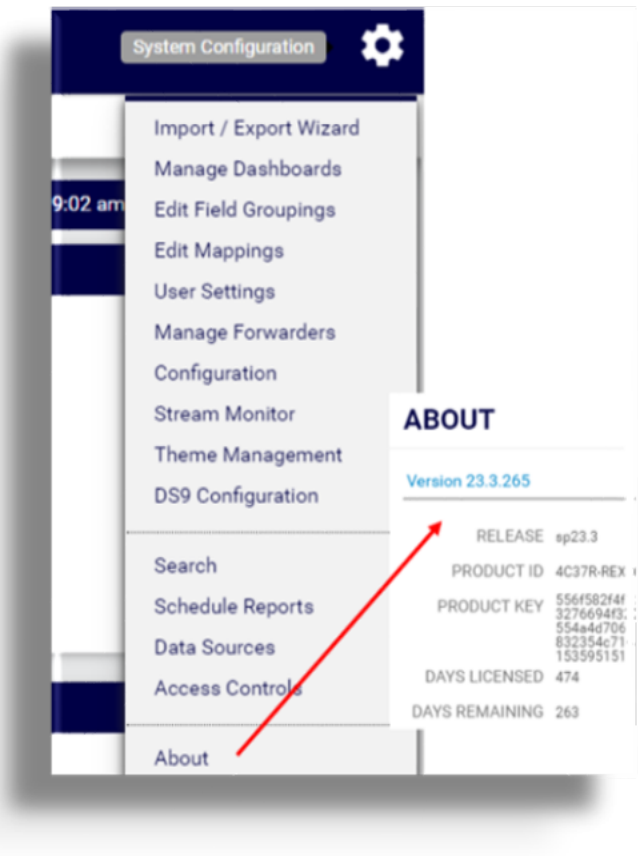


(Optional) Select **Perform Checksum** and enter the downloaded filename. This step will verify the downloaded file against its `.sha256` file.

5. Once the upgrade completes, reboot the server then log in again to verify.

1.7. Post Checks

Verify that the version of your system is updated. To do this via the GUI, click the **System Configuration** icon (Cog), then select **About**.



Note: If the version does not appear to be updated, clear your browser's cache and reconnect.

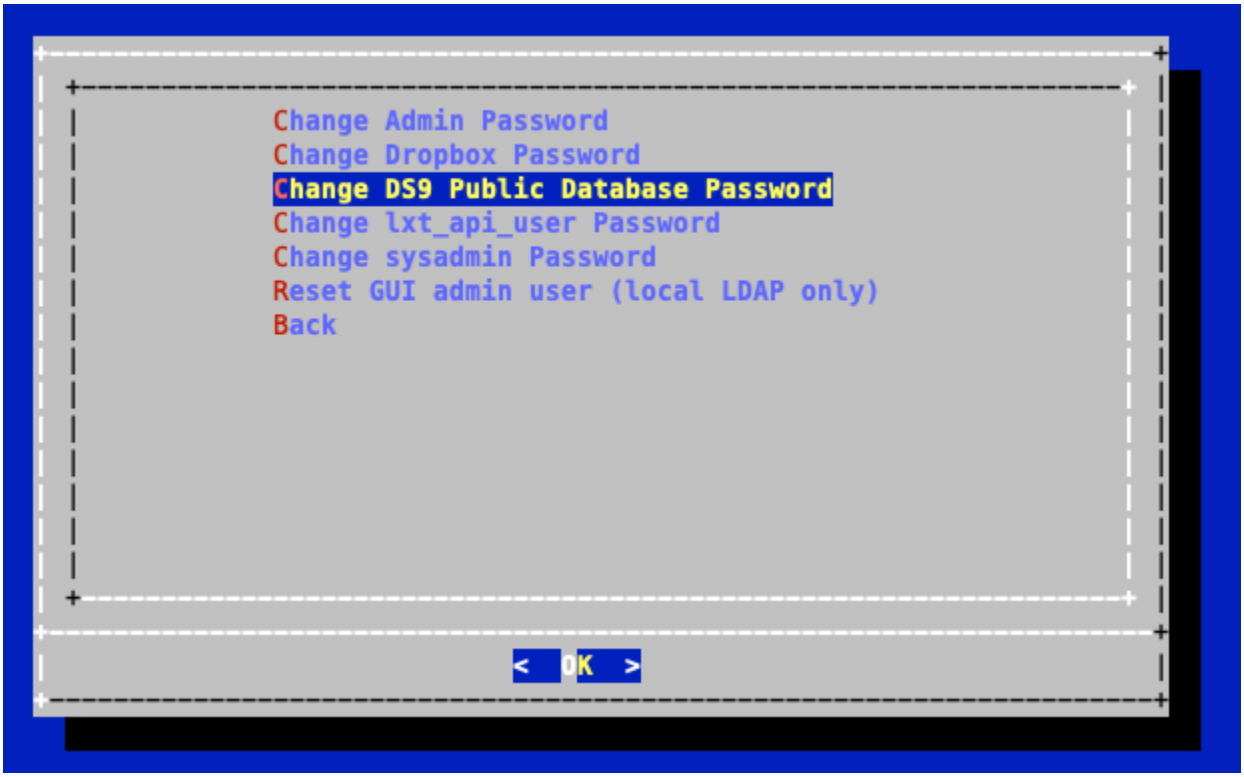
1.8. DS9 Database Password Management

DS9 is installed with a default, hidden password and Dashboard user `lxpublic`.

This database password can however be modified, as indicated below.

1.8.1. Maintain DS9 Database Password on DS9

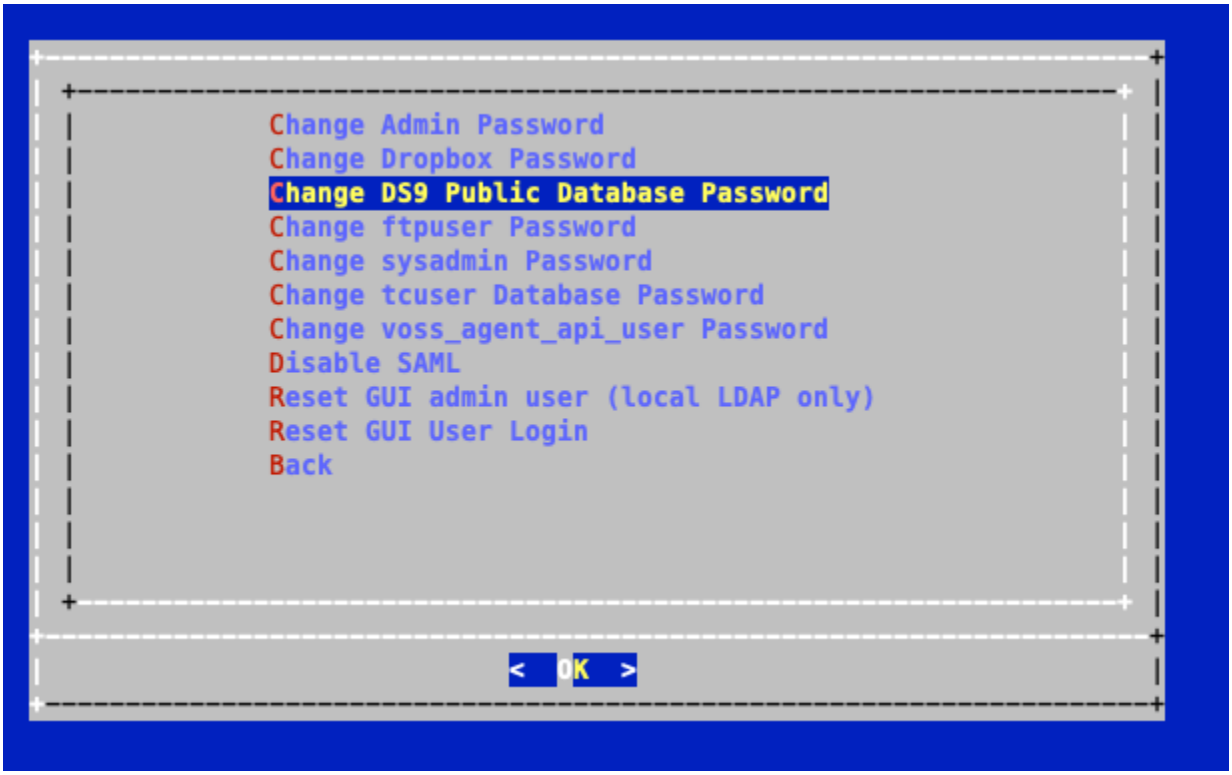
1. On the DS9 server, log in as `admin` from the console and from the **Administration** menu, select **Change Passwords**.
2. Select **Change DS9 Public Database Password** and modify the password. (Note: only alphanumeric characters are allowed)



3. Verify the credential configuration on the Arbitrator - see below.
4. Update the Dashboard **Data Sources** password for the DS9 server - see below.

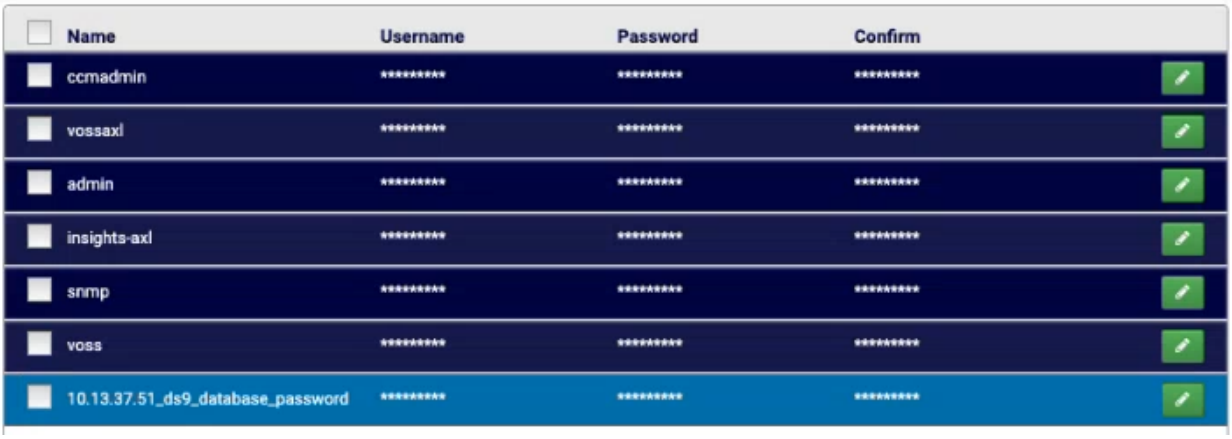
1.8.2. Maintain DS9 Database Password on Arbitrator

1. Log in as `admin` from the console and from the **Administration** menu, select **Change Passwords**.
2. Select **Change DS9 Public Database Password**.



3. Enter the DS9 IP address on the console and modify the password. (Note: only alphanumeric characters are allowed)

A change from the default credentials will also reflect on the Arbitrator menu: **CREDENTIAL CONFIGURATION**.



If this entry is removed, the DS9 credentials revert to the default, hidden credentials. While this entry can also be modified, it is advised to carry ou the task from the console **Change DS9 Public Database Password** menu.

1.8.3. Maintain DS9 Database Password on Dashboard

When a DS9 server password is modified on DS9 or the Arbitrator as indicated above, the modified password needs to be updated on Dashboard the **Data Sources** entry.

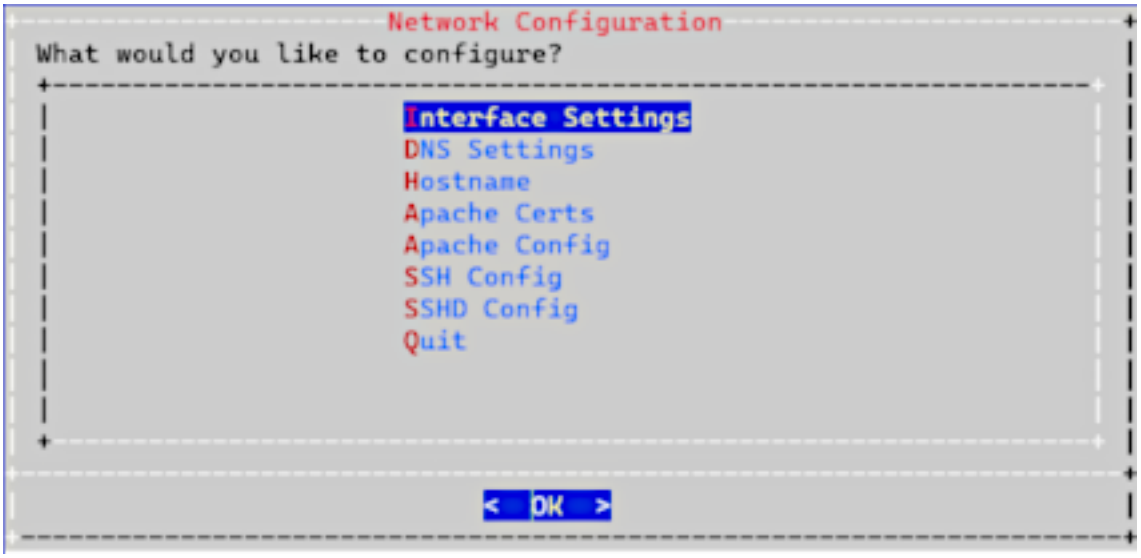
1. From the **System Configuration** icon on the dashboard, select **Data Sources**.
2. Update the **Password** field for all **Data Sources** that match the related DS9 host.

1.9. Arbitrator Automate Database Password Management

For users of the Arbitrator in VOSS Automate, a **Change Automate Public Database Password** menu is available to manage the database password used when configuring the Arbitrator on VOSS Automate.

2. Add or update certificates

Users can now update SSL certificates and SSL keys from the Admin console menu.



Note: If vulnerability testing yields “Weak hashing Algorithm” and “Self-Signed Certificate” issues, these can can be fixed by installing your own SSL certificate.

2.1. Add certificates

To add your own certificate, you will need both the certificate and private key.

1. SSH to the system using admin account
2. Select **Network Configuration**
3. Select **Apache Certs**
4. Select **Insert Cert**
5. Paste in customer certificate

   A certificate has the following headers and footers:

```
EXAMPLE:
-----BEGIN CERTIFICATE-----
MAIN SERVER CERTIFICATE
-----END CERTIFICATE-----
-----BEGIN CERTIFICATE-----
INTERMEDIATE CERTIFICATE
-----END CERTIFICATE-----
-----BEGIN CERTIFICATE-----
ROOT CERTIFICATE
-----END CERTIFICATE-----
```

Error checking and solutions:

- `Error 20 at 0 depth lookup:  unable to get local issuer certificate`

  The server certificate needs an intermediate certificate to validate. Add the intermediate certificate after the server certificate.

- `Error 2 at 1 depth lookup:  unable to get issuer certificate`

  The server certificate needs the root certificate to validate. Add the root certificate after the intermediate and or server certificate.

- ```
  Error loading file /etc/apache2/server.crt.tmp
  error:05800088:x509 certificate routines unknown function):
  no certificate or crl found:crypto/x509
  ```

  No certificate; invalid format; or blank.

6. Select **Insert Private Key**.
7. Paste in customer private key.

   A private key has the following header and footer
  ```

```
--BEGIN PRIVATE KEY--
--END PRIVATE KEY--
```

8. Select **Display Cert Details** to view certificate details.
9. Select **Back**, then exit the menu.
10. Refresh the browser. The system should be using the new certificate.

2.2. Generate a CSR from an existing certificate

If you want to generate a CSR for the current certificate:

1. SSH to the system using admin account.
2. Select **Network Configuration**.
3. Select **Apache Certs**.
4. Select **Generate Cert**.
5. Press **Enter**. The CSR displays on the screen.
6. Copy and save it.
7. Select **Back**, then exit the menu.
8. Refresh the browser. The system should be using the updated unsigned certificate.

2.3. Create new certificates

If you want to generate a new unsigned certificate or to reset a certificate and private key:

1. SSH to the system using admin account
2. Select **Network Configuration**
3. Select **Apache Certs**
4. Select **Generate New Unsigned Cert**

5. When prompted, fill in the information requested.

   - For `the number of days the certificate should be valid. (default 365):`, the value should be a positive number from 1 to 3650.

     Publicly Trusted Certificates: For certificates that need to be trusted by web browsers like Chrome, Firefox, or Safari, the maximum validity period is currently 398 days. This is a policy set by the CA/Browser Forum to enhance security by encouraging more frequent certificate renewals and updates.

     Self-Signed Certificates: When you are using OpenSSL to create a certificate for a private network or for testing purposes, you can set a much longer validity period. The tool itself does not prevent you from setting a very high number of days, but you may run into issues with the system's date and time representations (e.g., the Year 2038 problem on 32-bit systems).

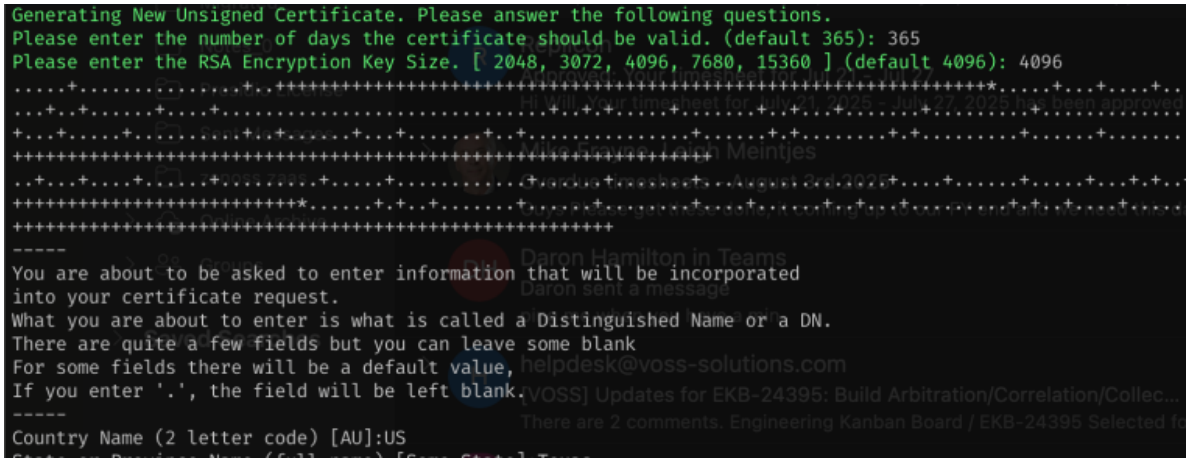
   - The default RSA Encryption Key Size is 4096.

     If the check: `Info: Checking modulus of the Certificate and Private Key.` returns with an error: `Error: Certificate and Private Key DO NOT MATCH`, the possible reasons could be:

     – Either wrong certificate uploaded.

     – Private key not uploaded.

     Then generate new unsigned certificate, which will generate a new key and certificate. |




```
Country Name (2 letter code) [AU]:
State or Province Name (full name) [Some-State]: Locality Name (eg, city) []:
Organization Name (eg, company) [Internet Widgits Pty Ltd]:
Organizational Unit Name (eg, section) []:
Common Name (e.g. server FQDN or YOUR name) []:
Email Address []:
```

6. Select **Back** and exit the menu.
7. Refresh browser. The system should be using the new unsigned certificate.