Upgrade Guide
SuccessMaker 9
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SuccessMaker 9

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Overview

This guide is for Information Technology personnel or Pearson engineers who will install the SuccessMaker® 9 (SM9) upgrade at an existing SuccessMaker site. It is also intended for use by customers with an operational SuccessMaker 7 (SM7) or SuccessMaker 8 (SM8) installation who are upgrading to SM9.

To use the instructions in this guide, you must be able to perform basic operating system tasks.

If you need assistance or have questions about installing SuccessMaker, contact Pearson Technical Support at: https://pearsonnacommunity.force.com/support/s/

To see up-to-date installation instructions, go to SuccessMaker 9 Announcements and Resources for the latest edition of this guide.

Upgrade

This section describes how to upgrade to SuccessMaker 9. Follow the instructions in the order presented.

The instructions in this chapter are for existing SM7 and SM8 installations only.

The upgrade process uses your current configuration settings for third-party applications. It will retain organizations, licenses, proficiency settings, and administrator accounts. Teachers and students will be deleted after being exported into a CSV file on the database server. The SM9 Import and End-of-Year Rollover can be used to import teachers, students, and specific assignments after the upgrade. See Knowledge Base article 4364 for details.

In multi-server environments, the upgrade process will automatically detect the deployment type. Possible deployment types include:

<table>
<thead>
<tr>
<th>Database Server (DB)</th>
<th>Stores organizations, users, and student performances records.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Server (App)</td>
<td>Delivers reports and different user interfaces, and stores audio recordings.</td>
</tr>
<tr>
<td>Web Server (Web)</td>
<td>Delivers static files, such as content.</td>
</tr>
</tbody>
</table>
Single Server

Contains DB, App and Web servers all on the same server.

If you are unsure of the server deployment type, see Knowledge Base article 5350 for details.
Before You Start

Before starting the installation, you must:

- Back up the existing SM7/SM8 database. See Knowledge Base article 1837.
- Close all applications.
- Disable all anti-virus applications.
- Ensure that your system meets the system requirements, available at SuccessMaker 9 Announcements and Resources.
- Ensure that you have access to copies of your Secure Sockets Layer certificates (SSL) if used in your environment for SuccessMaker.
- Download and extract the SM9 package.
- Deployments with multiple servers must upgrade in the following order:
  1. Database server (DB)
  2. Application servers (App)
  3. Web servers (Web)
- Each DB, App, and Web server must be updated to SM9 before attempting to use the system.
- Ensure the existing SuccessMaker server partition where SuccessMaker is installed contains at least 11.5 GB of free disk space. If SuccessMaker is not installed to the boot partition, ensure that the boot partition contains at least 2 GB of free disk space.

Downloading SuccessMaker 9

1. Log in with Administrator rights to the server or stand-alone workstation.
2. Browse to: http://smdownload.smhost.net/onlinedelivery/
3. Enter the organization’s customer number, and click Go.

Each organization, school, or district will have a separate customer number. If the customer number cannot be located, contact Pearson Technical Support at https://pearsonnacommunity.force.com/support/s/.
4. Read the license agreement and click **I Agree** to accept.
5. Follow the onscreen instructions. Instructions vary by operating system.
6. On completion of the download, mount the ISO image. For more information on how to mount an ISO image, see Knowledge Base article 4483.

The download is approximately 10 GB in total size, if you encounter technical issues, contact Pearson Technical Support at [https://pearsonnacommunity.force.com/support/s/](https://pearsonnacommunity.force.com/support/s/).

### Upgrading

The following sections describe how to upgrade from SM7 or SM8. Use the instructions for your type of implementation.

The SM9 upgrade will automatically detect the current version and deployment type of SuccessMaker. Any version of SM7 or SM8 single-server, DB, App, or Web-only servers can be upgraded directly to SM9. If you are unsure of your SuccessMaker version, see Knowledge Base article 4348 for details on how to determine your current version.

For database-only server upgrades it is recommended that you first stop the tomcat service on all App or Web servers before running the DB server-only upgrade. For information on how to stop and start the SuccessMaker services see knowledge base article number 2794.

### Windows: Upgrading SuccessMaker

Follow the instructions in this section to run the SuccessMaker 9 upgrade on a Microsoft® Windows® implementation.

To upgrade in a Windows implementation:

1. Log in with Administrator rights to the server or stand-alone workstation.
2. Click **Start** on the taskbar, and then browse to the mounted location of the **SuccessMaker9.iso** components.
3. Double-click the **successmaker.exe** file to initiate the upgrade.
4. On the Introduction page, review the information and click **Next**.
5. Follow the instructions for the server type:
   - For single-server or DB-only upgrades, a PostgreSQL Account Information page appears. Enter the existing PostgreSQL® password and click **Next**.
     
     A **Database Validation Failed** error message appears if an incorrect PostgreSQL password is entered. Click **OK**, enter the correct password, and then click **Next**. If you do not know the PostgreSQL password, review Knowledge Base article [2922](#) for password retrieval.
     
     - For Application-only server upgrades, a Tomcat Service Account Details page appears. Select **Use System Account** and click **Next**.
     - For a Web-only server, proceed to the next step.

6. On the Pre-Installation Summary page, verify your selections, and then click **Install**.

7. The Installing SuccessMaker page appears. Depending on the hardware, deployment type, and your previous version usage, the upgrade installation will take from 30 minutes to two hours.

8. On the Install Complete page, review the message to confirm it displays:
   "Congratulations! SuccessMaker has been successfully installed to: [path] Press “Done” to quit the installer"

   where *path* is the location of the installed product, for example, C:\Program Files (x86)

   If the screen contains a different message such as text that indicates that the upgrade finished with errors, contact Pearson Technical Support at: [https://pearsonnacommunity.force.com/support/s/](https://pearsonnacommunity.force.com/support/s/).

9. Click **Done**, and then restart the server.

   **IMPORTANT**: If using over 400 concurrent users, performance tuning modifications are required. Performance settings are modified with the Installation Management Utility (IMU). Complete the "Performance Tuning a SuccessMaker Server with Over 400 Concurrent Users" steps in the Installation Management Utility section.

   For multi-server deployments, repeat steps 1-9 for each DB, App, and Web server in your environment.
10. **OPTIONAL**: After you finish the upgrade, you can perform the rollover process for any single-server or DB-only servers, if you want to retain teachers, students, or student assignments. For instructions on how to use the rollover process, see Knowledge Base article 4364 for details.

11. After you have completed the rollover process or if no rollover is to be performed, you are ready to complete the post-installation tasks. Proceed the [Post-Installation](#) section.

**Mac: Upgrading SuccessMaker**

Follow the instructions in this section to run the SuccessMaker 9 upgrade on an Apple® Macintosh® (Mac®) implementation.

To upgrade in a Mac implementation:

1. Log in with Administrator rights to the server or stand-alone workstation.
2. Open **Terminal** located in **Applications > Utilities**.
3. Type `su` and press **Enter**.
4. Enter the root password and press **Enter**.
5. Change into the mounted directory location of the **SuccessMaker9.iso** components in **Terminal**.
6. Type the following case sensitive command:
   
   ```bash
   ./successmaker_mac.bin
   ```

7. On the Introduction page, click **Next**.

8. For single-server or DB-only servers, a PostgreSQL Account Information page appears. Enter the existing PostgreSQL password and click **Next**.

   **Note:** A **Database Validation Failed** error message appears if an incorrect PostgreSQL password is entered. Click **OK**, enter the correct password, and then click **Next**. If you do not know the PostgreSQL password, review Knowledge Base article 2922 for password retrieval.

9. On the Pre-Installation Summary page, verify your selections and click **Install**.

10. The Installing SuccessMaker page appears. Depending on the hardware, deployment type, and your previous version usage, the upgrade installation will take from 30 minutes to two hours.
11. On the Install Complete page, review the message to verify it displays:
"Congratulations! SuccessMaker has been successfully installed to: [path] Press "Done" to quit the installer"
where path is the location of the installed product, for example, /Applications
If the screen contains a different message, such as text that indicates that the upgrade finished with errors, contact Pearson School Technical Support at https://pearsonnacommunity.force.com/support/s/.

12. Click Done, and then restart the server.
   IMPORTANT: If using over 400 concurrent users, performance tuning modifications are required. Performance settings are modified with the Installation Management Utility (IMU). Complete the "Performance Tuning a SuccessMaker Server with Over 400 Concurrent Users" steps in the Installation Management Utility section.

   For multi-server deployments, repeat steps 1-12 for each DB, App, and Web server in your environment.

13. OPTIONAL: After you finish the upgrade, you can perform the rollover process for any single-server or DB-only servers if you want to retain teachers, students, or student assignments. For instructions on how to use the rollover process, See Knowledge Base article 4364 for details.

14. After you have completed the rollover process or if no rollover is to be performed, you are ready to complete the post-installation tasks. Proceed the Post-Installation section.

**Novell SLES and openSUSE: Upgrading SuccessMaker**

Follow the instructions in this section to run the SuccessMaker 9 upgrade on a Novell® SUSE Linux® Enterprise Server (SLES) or Novell openSUSE implementation.

To upgrade in a Novell SLES or openSUSE implementation:

1. Log in with Administrator rights to the server.
2. Open Terminal located in Applications.
3. Type su - and press Enter.
4. Enter the root password and press Enter.
5. Change into the mounted directory location of the SuccessMaker9.iso components in Terminal.

6. Type the following command:
   chmod 744 ./successmaker.bin

7. Type the following command:
   ./successmaker.bin


9. For single-server or DB-only upgrades, a PostgreSQL Account Information page appears. Enter the existing PostgreSQL password and click Next.

   Database Validation Failed error message appears if an incorrect PostgreSQL password is entered. Click OK, enter the correct password, and then click Next. If you do not know the PostgreSQL password, review Knowledge Base article 2922 for password retrieval.

10. On the Pre-Installation Summary page, verify your selections and click Install.

11. The Installing SuccessMaker page appears. Depending on the hardware, deployment type, and your previous version usage, the upgrade installation will take from 30 minutes to two hours.

12. On the Install Complete page, review the message to verify it displays:
   "Congratulations! SuccessMaker has been successfully installed to: [path] Press "Done" to quit the installer"

   where path is the location of the previously installed product, for example, /opt

   If the screen contains a different message, such as text that indicates that the upgrade finished with errors, contact Pearson Technical Support at https://pearsonnacomunity.force.com/support/s/.

13. Click Done, and then restart the server.

    IMPORTANT: If using over 400 concurrent users, performance tuning modifications are required. Performance settings are modified with the Installation Management Utility (IMU). Complete the "Performance Tuning a SuccessMaker Server with Over 400 Concurrent Users" steps in the Installation Management Utility section.
For multi-server deployments, repeat steps 1 to 13 for each DB, App, and Web server in your environment.

14. **OPTIONAL:** After you finish the upgrade, you can perform the rollover process for any single-server or DB-only servers if you want to retain teachers, students, or student assignments. For instructions on how to use the rollover process, See Knowledge Base article [4364](#) for details.

15. After you have completed the rollover or if no rollover is to be performed, you are ready to complete the post-installation tasks. Proceed the [Post-Installation](#) section.

**Post-Installation Tasks**

This section describes the post-installation tasks necessary to configure your SuccessMaker 9 installation. These tasks are designed to license and check your installation to verify that everything is operational.

**Server Checklist**

- Upgrade Information
- MAMA Configuration and Connectivity
- SuccessMaker Server Installation Logs
- Content Checksum Validation

**Client Checklist**

- Client Configuration Checklist
- Verifying the SuccessMaker Home Page Access

**Server Checklist**

To complete the following server checklist tasks, log in as a user with Administrative or root permissions.

**Upgrade Information**

- During the upgrade, the following items were preserved from the SM7 or SM8 installation:
  - System, District, and School Administrator Accounts
  - District and School Organizations
  - License Keys
Proficiency Scale Settings
Teacher, Student, and Student assignments if a rollover was performed

Log in to SM with an administrator account and confirm these data points are present.

**MAMA Configuration and Connectivity**

The Monitoring and Management Application (MAMA) server is used to distribute updates for SuccessMaker. Each installation has a MAMA client installed, which must be configured to receive updates. In this procedure, you will configure the client to receive all available updates.

**IMPORTANT:** MAMA updates are required to be downloaded prior to first use of SuccessMaker to receive critical updates for Math and Reading.

- Standards and Alignments were included with the installation and are no longer required to be downloaded through the MAMA client. Standards and alignments are applicable for single and application servers only.

- The client resolution must be set to 1024x768 or above. A smaller resolution will not display the entire administrator tool interface.

**To check the MAMA configuration:**

1. To access the MAMA configuration page or Admin Tool from the server or stand-alone workstation, enter the following URL into a supported web browser: http://localhost:18080/admintool/

2. On the left menu, click **Start/Stop MAMA Client**. The MAMA Client Service Commands window appears.

3. Click **Stop**, and then click **Submit**.

   - Some Operating Systems will not display the Current Status of the service.
   - The ability to manage the service still functions.

4. On the left menu, click **Set MAMA Client Properties**.
5. Verify the following:

If the server was updated from SM7 or SM8, the following fields will be populated initially with a value of zero before receiving updates: Production Version, Content Version (Math and Reading), National and State standard versions.

<table>
<thead>
<tr>
<th>Field</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Server ID</td>
<td>Confirm it populated correctly.</td>
</tr>
<tr>
<td>Current Site ID</td>
<td>Confirm it populated correctly.</td>
</tr>
<tr>
<td>Current School ID</td>
<td>Confirm it populated correctly.</td>
</tr>
<tr>
<td>New Debug Switch</td>
<td>Must be set to <strong>on</strong> (lowercase) to receive updates immediately. Make sure no one is using the system while updates are being applied. Set this option to <strong>off</strong> before using the product.</td>
</tr>
<tr>
<td>Current MAMA Proxy URL</td>
<td>If server uses proxy to access the Internet</td>
</tr>
<tr>
<td>Current MAMA Proxy Port</td>
<td>If server uses proxy to access the Internet</td>
</tr>
<tr>
<td>Current Content Root</td>
<td>Relative location where content was installed</td>
</tr>
<tr>
<td>Standard State ID</td>
<td>Verify that the state is correct.</td>
</tr>
<tr>
<td>National Standards ID</td>
<td>Verify the box displays (NATL)</td>
</tr>
</tbody>
</table>

6. Set the **New Debug Switch** value to **ON** to receive updates immediately after completing the installation.

7. Click **Submit**. The Set Calling Time window appears.
8. Select a time from the drop-down list. This time is when the server will call into MAMA to receive updates, when the debug switch is set to OFF. All students and users should be off the system during this call-in time.

   A known issue exist when setting the call in time to 23:00 – 23:45. Set the call in time with a value less than 23:00. For details see Knowledge Base article number 4556.

9. Click **Submit**.

10. Verify that The **MAMA client properties have been set successfully!** message appears.

11. On the left menu, click **Start/Stop MAMA Client**. The MAMA Client Service Commands window appears.

12. Click **Start**, and then click **Submit**. After a moment, the MAMA Client Services Current Status should display **RUNNING**.

   Current Status does not display on all operating systems.

13. Click **View Update Info/Status** to monitor the progress of the updates being applied.

   The total update time required for updates to apply will vary depending on the speed of your Internet connection and number of updates available. Review the Knowledge Base article 3989 to verify the current MAMA values are displayed to confirm successful completion.

14. After updates finish downloading and are installed, stop the MAMA Client and set Debug to **OFF** by following steps 2-12 replacing ON with OFF for step 6. Submit your changes.

15. **Start** the MAMA client and close all open windows.

**SuccessMaker Server Installation Logs**

The SuccessMaker server installation creates installation logs to the /Pearson/SuccessMaker/Logs folder. For SM9 there will be two primary installation log files.
SuccessMaker _YYYY-MM-DD-HHMSS.log

Ant_SuccessMaker
_YYYY-MM-DD-HHMSS.log

The specific full name of the log file will vary and will be based on the year and date the log file was created. One set of these logs will exist for each installation or MAMA update.

1. Open each of the Ant_SuccessMaker log files found reflecting the date of your installation and or MAMA updates, scroll to the bottom of the file and ensure the text **BUILD SUCCESS** is indicated towards the end of the file.

2. Open each of the SuccessMaker log files found reflecting the date of your installation and or MAMA updates and ensure no errors are indicated within the logs. For the SuccessMaker logs locate the Summary section of the log and ensure the following:
   - **Installation: Successful**
   - 0 Warnings
   - 0 NonFatalErrors
   - 0 FatalErrors

**OPTIONAL:** Review the Knowledge Base article [3973](#) for additional server installation log file details and examples.

**IMPORTANT:** If there are any warnings, nonfatal or fatal errors in the SuccessMaker log or if the ant log does not indicate build success, the installation failed. Contact Pearson Technical Support at [https://pearsonacommunity.force.com/support/s/](https://pearsonacommunity.force.com/support/s/).

**Content Checksum Validation**

**IMPORTANT:** In a multi-server environment, content validation must be performed against each Web server.

Once the installation is complete, MAMA updates have been applied, and installation logs confirmed, check to ensure all of the content files were installed successfully. See Knowledge Base article [4984](#) and complete the steps for your operating system (Windows, Mac OS X Server, SLES, or openSUSE).

**Client Checklist**

To complete the following Client Checklist tasks, log in as a user with Administrative rights to the client workstation.
**Client Configuration Checklist**

Ensure that the following requirements are met and the software packages are installed and working properly on the Client workstation.

- Ensure that your system meets the system requirements, available at [SuccessMaker 9 Announcements and Resources](#).
- The workstation resolution for all client computers is set to 1024x768 or above.
- Adobe® Reader® is installed. (required for teacher stations only)

**Verifying the SuccessMaker Home Page Access**

1. Enter the following URL into a supported web browser:
   - http://serverip or http://serverip/lms/sm.view
   - where `serverip` is the IP address of the web server

   For standalownworkstations, the SuccessMaker Home page is:
   - http://127.0.0.1 or http://127.0.0.1/lms/sm.view

2. Verify that the SuccessMaker graphic appears.

3. On the SuccessMaker Home page, click the ENTER HERE button.

4. Log in as either a System, District, or School Administrator account, or as a student. The admin or student interface appears

   You have completed the post-installation tasks. Now, you can create your baseline backup for the school. Proceed the Backup section.

**Backup**

This section describes how to back up your SuccessMaker data. To use these instructions, you must be able to perform basic Windows, Mac OS X, or Novell Linux Server tasks.

**Before You Start**

Before beginning the backup process, verify the following:

- Administrative, root, or equivalent access to the server or stand-alone workstation is available.
Sufficient hard drive space is available; it varies based on the number of users and schools.

No users are logged into SuccessMaker.

**Creating a Backup**

After SuccessMaker is installed and has received all of the latest updates, you must create a baseline system backup.

The database contains fluency files, user information, and student history. This section describes how to back up the database for each platform: Windows, Mac OS X Server, Novell SLES, and Novell openSUSE.

**Windows: Backing Up the Database**

The database backup is documented in the Knowledge Base article [1837](#). Review the article and download the **SMBBackups.zip** attachment. Extract the files from SMBBackups.zip.

**To verify *.bat script functionality:**

1. Log in to the server or stand-alone workstation with Administrator rights.

2. Move the `smbackup_automated_<version>.bat` file to any location, such as

   `[path]\Pearson\SuccessMaker\`

   where `path` is the installation location; the default path is C:\Program Files (x86)

3. Right-click the `smbackup_automated_<version>.bat` file and choose **Run as administrator**. Click **Yes** if prompted with a User Account Control dialog asking if you want the following program to make changes to this computer.

   The backup will run in command prompt and automatically close the window after successful completion. The elapsed time depends on the database size.

4. Launch Windows Explorer and browse to:

   `[path]\Pearson\SuccessMaker\LMSBackup\`

   where `path` is the installation location; the default path is C:\Program Files (x86)
5. Verify that either a **Daily** or **Weekly** folder appears.

A **Daily** folder is created if backup runs on Monday-Thursday. A **Weekly** folder appears if backup runs on Friday. Backups will not run on Saturday or Sunday.

6. Browse either the **Daily** or **Weekly** folder and verify that the successmaker.dump file exists and has a file size larger than 0KB.

**IMPORTANT:** Pearson recommends that you regularly back up the database. You can use a task scheduler to force a backup script to run a minimum of twice weekly, with one day being Friday.

Pearson recommends that you also maintain a copy of the SuccessMaker backups within your enterprise backup solutions on a separate server. If the server fails, you will still have a backup of the database. You are responsible for integrating the SuccessMaker backups into your regular data protection strategy. Be sure to include the **lmsbackup** folder in your enterprise solution backup strategy.

You have completed and verified the installation, and performed a backup. You are ready to use SuccessMaker 9. See **Reference Materials**, to review best practices and other procedures.

**Mac OS X Server: Backing Up the Database**

The database backup is documented in the Knowledge Base article [1837](#). Review the article and download the **SMBackups.zip** attachment. Extract the files from **SMBackups.zip**.

**To verify *.sh script functionality:**

1. Log in to the server or stand-alone workstation with Administrator rights.
2. Move the **smbackup_automated_<version>.sh** file to any location, such as
   
   `[path]/Pearson/SuccessMaker/
   
   where `path` is the installation location; the default path is `/Applications`
3. Open **Terminal** on the file server.
4. Type **su** and press **Enter**.
5. Type the root password and press **Enter**.
6. Type the following command (use the location in step 2):
   
   ```
   cd /[path]/Pearson/SuccessMaker/
   ```

   where `path` is the installation location; the default path is `/Applications`

7. Press **Enter**.

8. Type the following command:
   
   ```
   sh ./smbackup_automated_<version>.sh
   ```

9. Press **Enter**.

   The backup runs in Terminal and displays the "Backup Complete" message when finished. The elapsed time depends on the database size.

10. Launch **Finder** and browse to:

    ```
    /[path]/Pearson/SuccessMaker/LMSBackup/
    ```

    where `path` is the installation location; the default path is `/Applications`

11. Verify that either a **Daily** or **Weekly** folder appears.

    A **Daily** folder is created if backup runs on Monday-Thursday. A **Weekly** folder appears if backup runs on Friday. Backups will not run on Saturday or Sunday.

12. Browse either the **Daily** or **Weekly** folder and verify that the `successmaker.dump` file exists and has a file size larger than 0KB.

    **IMPORTANT**: Pearson recommends that you regularly back up the database. You can use a task scheduler to force a backup script to run a minimum of twice weekly, with one day being Friday. Pearson recommends that you also maintain a copy of the SuccessMaker backups within your enterprise backup solutions on a separate server. If the server fails, you will still have a backup of the database. You are responsible for integrating the SuccessMaker backups into your regular data protection strategy. Be sure to include the **lmsbackup** folder in your enterprise solution backup strategy.

You have completed and verified the installation, and performed a backup. You are ready to use SuccessMaker 9. See **Reference Materials**, to review best practices and other procedures.
**Novell SLES and openSUSE: Backing Up the Database**

The database backup is documented in the Knowledge Base article 1837. Review the article and download the **SMBackups.zip** attachment. Extract the files from **SMBackups.zip**.

**To verify *.sh script functionality:**

1. Log in to the server with Administrator rights.
2. Move the `smbackup_automated_<version>.sh` file to any location, such as `[/path]/Pearson/SuccessMaker/` where `/path` is the installation location; the default path is `/opt`
3. Open **Terminal** on the file server.
4. Type **su** and press **Enter**.
5. Type the root password and press **Enter**.
6. Type the following command (use the location in step 2):
   ```
   cd [/path]/Pearson/SuccessMaker/
   ```
   where `/path` is the installation location; the default path is `/opt`
7. Press **Enter**.
8. Type the following command:
   ```
   sh ./smbackup_automated_<version>.sh
   ```
9. Press **Enter**.

   ![Backup Complete]

   The backup runs in Terminal and displays the "Backup Complete" message when finished. The elapsed time depends on the database size.

10. Launch **File Browser** and browse to:
    ```
    [/path]/Pearson/SuccessMaker/LMSBackup/
    ```
    where `/path` is the installation location; the default path is `/opt`
11. Verify that either a **Daily** or **Weekly** folder appears.

    ![Daily Weekly]

    A **Daily** folder is created if backup runs on Monday-Thursday. A **Weekly** folder appears if backup runs on Friday. Backups will not run on Saturday or Sunday.
12. Browse either the **Daily** or **Weekly** folder and verify the `successmaker.dump` file exists and has a file size larger than 0KB.

**IMPORTANT:** Pearson recommends that you regularly back up the database. You can use a task scheduler to force a backup script to run a minimum of twice weekly, with one day being Friday. Pearson recommends that you also maintain a copy of the SuccessMaker backups within your enterprise backup solutions on a separate server. If the server fails, you will still have a backup of the database. You are responsible for integrating the SuccessMaker backups into your regular data protection strategy. Be sure to include the `lmsbackup` folder in your enterprise solution backup strategy.

You have completed and verified the installation, and performed a backup. You are ready to use SuccessMaker 9. See **Reference Materials**, to review best practices and other procedures.

## Reference Materials

This section includes the following reference materials:

- **Best Practices**
- **Enabling SSL Security**
- **Installation Management Utility**
  - Resetting an Existing System or District Account Password

## Best Practices

To optimize user experience, Pearson recommends the following best practices.

- The latest service packs and hot fixes are applied to both the client workstations and the server operating systems.
- The network switches, workstations, and servers are configured to the correct duplex settings.
- The workstation’s Network Interface Card (NIC) is configured never to power off.
- The hardware has the latest manufacturer updates and patches.
- The workstations have a resolution of 1024x768 or greater.
- Pop-up blockers are turned off.
- SSL is enabled for added security.
Enabling SSL Security

By default, the SuccessMaker 9 installation will not enable Secure Socket Layer (SSL). All content and URL access is over port 80 using HTTP. To enable SSL for SM9, you will need a purchased certificate from a trusted Certificate Authority (CA).

Review Knowledge Base article 4356 for a complete guide to enabling SSL.

It is a Pearson best practice to enable SSL for added security of SM9.

Once SSL has been enabled, the three interfaces (administrator, teacher, and student) will be over SSL. All content and reporting will be over SSL, as well.

End users accessing SM9 must use the https://serverip format to gain access.

where serverip is the IP address of the Web server

Installation Management Utility

The Installation Management Utility (IMU) can be used to recover a system or district administrator password or to performance tune the SuccessMaker servers.

Resetting an Existing System or District Account Password

1. Open a web browser and access this URL: http://serverip:18080/IMU/
   where serverip is the IP address of the SM single or Database-only server

2. Enter username and password and click Login.
   - **Username** = MAMA SchoolID (case-sensitive)
   - **Password** = MAMA ServerID (case-sensitive)

3. Under SM Management, click Login Recovery.

4. Highlight an account in the list and click Select User.

5. In the Change Password box:
   - Enter the new password for Password.
   - Enter the new password again for Confirm.

6. Click Change Password.

7. In the Info box, click OK.

8. Close all browsers.
Performance Tuning a Server with over 400 Concurrent Users

If using over 400 concurrent users, performance tuning modifications are required. Complete the following steps for installations that have over 400 concurrent users.

1. Open a web browser and access the URL: http://serverip:18080/IMU/
   where serverip is the IP address of the SuccessMaker single, Database, Application, or Web-only server

2. Enter username and password and click Login.
   - Username = MAMA School ID (case-sensitive)
   - Password = MAMA Server ID (case-sensitive)


4. Click Change Settings.

5. By default, IMU will be set for 400 concurrent users.

6. Choose the appropriate Concurrent Users limit.

7. Click Change Configuration.

   The Tomcat, Apache, and PostgreSQL services will cycle their service during this time. Users will not be able to access SuccessMaker for a few minutes as the services restart.

8. Close all browsers.

Congratulations. Your upgrade to SuccessMaker 9 is complete.