Primo May 2018 Release:
A Path to Discovery

The Inca Trail
Pass through cloud forest and alpine tundra along Peru’s glorious high-altitude hiking route.

Primo Service Pack Installation Guide
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Web address: http://www.exlibrisgroup.com
Getting Started

To install SP updates, Primo provides the following methods:

- **The Automatic SP Installation Method** – Allows you to install SP updates via your Back Office UI. This method cannot be used for sites that use multiple BO or FE topologies.

- **The Manual SP Installation Method** – Allows you to install SP updates from your Primo machines.

- **The Util SP Installation Method** – Allows you to install SP updates from your Primo machines via a menu-driven utility. In addition, it allows you to update software for third-party products.

Before you begin a SP update, make sure that you review the release notes. For more information, see Release Notes.

On occasion, it is necessary to update Primo between SPs via hot fixes. For more information on installing hot fixes, see Hot Fixes.

Release Notes

The Release Notes describe each fix included in the SP. Because some fixes may require you to run implementation scripts manually, review the descriptions and implementation notes for details.

<table>
<thead>
<tr>
<th>Release Notes Example</th>
<th>Implementation Notes</th>
<th>Module</th>
<th>Case Number</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Added the Port field to the Offine Page page of Primo Home &gt; Publishing &gt; Create New Port for FTP and FTP harvesting methods. If request is specified, the URL extra space is removed from the page. The navigation links that appear on the Brief Results page are highlighted, and the search results. In the following example, the words &quot;Home&quot; and &quot;principal&quot; are highlighted.</td>
<td>GO configuration - Primo tools</td>
<td>Front End - Look and feel</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>If search terms contained underscores (such as data, archive), lower than expected results were returned. This has been fixed to return results based on the search terms. The query &quot;Hiento principal&quot; no longer includes WoS cites when WoS is not activated for the user.</td>
<td>Search Engine highlighting</td>
<td>177083, 180019, 216554</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Prin Hebrew words appearing with a leading article &quot;the&quot; or &quot;an&quot;, the form without the leading article is now considered an inflected form and will be searched in all enhancements contexts that make use of inflected forms.</td>
<td>Front End, Front End - Basic Search</td>
<td>199721, 201409</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

To view the Release Notes from the Back Office, click the About link from the Back Office home page and then click the View SP Release Notes link on the About page.

To view the Release Notes from a Web browser, see Release Notes.

Resources

The following are other guides available for the Primo system:

- **Primo Back Office Guide**

- **Primo System Administration Guide**

- **Primo Technical Guide**
• Primo Interoperability Guide
The Automatic SP Installation Method

The About page in the Back Office allows to download, distribute, and install SP and hot fix files automatically on your Primo system.

If you prefer to install updates manually, refer to the following sections:

- The Util SP Installation Method
- Installing Hot Fixes

Sites that use multiple BO or FE topologies must install SPs and hot fixes manually. Please refer to the following procedures:

- Manually Installing the SP
- Installing Hot Fixes

To install the SP automatically from the Back Office:

1. From a web browser, enter the URL for the Back Office home page, for example:
   http://primo.exlibris.com:1602/primo_publishing/admin/acegilogin.jsp

2. Click the About link. The following page opens:

   ![About Page - Check for Updates]

3. Click the Check for updates link. If an SP is found, the following page opens:
4. If an SP is available, click the Download <month> <year> Release link to download the SP package to the following directory on the BO server (see About Page - Distribute SP), where <v> is the Primo version in which Primo was first installed, and <x> is the Primo copy:

/exlibris/primo/p<v>_<x>/ng/primo/home/system/publish/service_pack_download

When the download is complete, the following page opens:

5. Click the Distribute <month> <year> Release link.

Note

If an SP is not available, the About page displays the following message with a timestamp:

There is no new SP - <time><date>

Note

If the download does not complete for any reason, invoking the download again will resume the download from the point at which it was stopped.
When the distribution is complete, the following page opens:

<table>
<thead>
<tr>
<th>Version</th>
<th>April 2015 Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build Date</td>
<td>25/03/2015 12:12:00</td>
</tr>
<tr>
<td>Build Mode</td>
<td>Local</td>
</tr>
</tbody>
</table>

View SP Release Notes

Install July 2015 Release

---

6. Click the **Install <month> <year> Release** link.

---

**Note**

The installation time varies per site and configuration.

---

7. Enter the following commands to stop the Primo Apache server:

   `apcb`  
   ```bash`  
   ./apachectl stop`  

---

**Note**

If the Apache server is not running, you will see and can ignore the following error message:

   `./apachectl stop: httpd (no pid file) not running`

---

8. Stop all Primo servers (**be_stop**, **fe_stop** and/or **se_stop**), as determined by the roles (BE, SE, and FE) supported on this server. For example, if the Primo server supports the BE, FE, and SE roles, enter the following commands:

   `be_stop`  
   `fe_stop`  
   `se_stop`
9. Start all Primo servers (`be_start`, `fe_start` and/or `se_start`), as determined by the roles (BE, SE, and FE) supported on this server. For example, if the Primo server supports the BE, FE, and SE roles, enter the following commands:

```
be_start
fe_start
se_start
```

**Note**

For sites using a multiple FE configuration, you must stop the BE server before stopping the FE servers.

10. If the Apache server was stopped in step 7, enter the following commands to restart the Primo Apache server:

```
apcb
/apachectl start
```

**Note**

To prevent a startup failure, start the FE server before the SE server.

11. Run manual and optional implementation scripts as described in the Release Notes. For more information, see [Running Implementation Scripts](#).  

12. If you need to conserve disk space, you can remove files under the following directories, but you will need to download the SP if you decide to roll back the SP and re-install it:

- `/exlibris/primo/p<v>_<x>/service_pack_install`
- `/exlibris/primo/p<v>_<x>/ng/primo/home/system/publish/service_pack_download`

Do not remove files in the `/exlibris/primo/p<v>_<x>/service_pack` directory.

13. From the Primo Back Office home page, click **Deploy All** to complete the installation.
The Manual SP Installation Method

This section includes:

- Manually Installing the SP
- SP Installation Log File
- Accessing the FTP Site
Manually Installing the SP

This section contains the steps needed to download, distribute, and install the SP files manually on your Primo system.

After you have downloaded the installation files from the FTP server, the installer still **requires** access to the Ex Libris FTP server to download additional information (such as third-party updates).

Repeat the following steps for each Primo machine and copy. Run all steps as the `primo` user and make sure that you install the SP on the machine that contains the Back Office (BE) application first.

---

**Note**

If your Primo topology includes a dedicated DB server, do not install the SP on that server.

---

To install the SP manually:

1. Log on to the server as the `primo` user.

   **Note**
   
   If your server has more than one copy of Primo, the system prompts you to select a copy.

2. Enter the following command to change to the Primo software directory, where `<v>` is the Primo version in which Primo was first installed and `<x>` is the Primo copy:

   ```bash
   cd /exlibris/primo/p<v>_<x>
   ```

3. Create the SP installation directory if it is not already created.

   ```bash
   mkdir service_pack_install
   ```

4. Enter the following command to move to the `service_pack_install` directory:

   ```bash
   cd service_pack_install
   ```

5. Enter the following commands to download the SP files from the FTP site, where `<v>` is the Primo version of the SP, `<r>` is the minor release, and `<u>` is the SP number. When prompted, use `primo4_sp` for the user and `4pgrade` for the password.

   ```bash
   ftp ftp.exlibrisgroup.com
   bin
   prompt off
   mget PRIMO-<v>.-<r>-ServicePack-<u>.tar.gz *
   quit
   ```
6. If the SP is split into multiple files, which is indicated by the suffix on the file name (such as 
   _aa, _ab, and so forth), enter the following command to combine all of the files into a single gz file:
   
   cat PRIMO-<v>.<r>-ServicePack-<u>.tar.gz* > PRIMO-<v>.<r>-ServicePack-<u>.tar.gz

7. Enter the following command to extract the files from the tar file:
   
   gzip –dc PRIMO-<v>.<r>-ServicePack-<u>.tar.gz | tar -xvf -

8. The Primo server supports three Primo Application Roles: BE (Back Office), SE (Search Engine), and FE (Front End).
   Enter the following command to determine which types are supported on this Primo server:
   
   echo $APP_ROLE

Note

Make sure that you update the server that contains BE first.

9. Enter the following commands to stop the Primo Apache server:
   
   apcb
   ./apachectl stop

Note

If the Apache server is not running, you will see and can ignore the following error message:
   
   ./apachectl stop: httpd (no pid file) not running

10. Stop all Primo servers (be_stop, fe_stop and/or se_stop), as determined by the roles (BE, SE, and FE) 
    supported on this server. For example, if the Primo server supports the BE, FE, and SE roles, enter the following 
    commands:
    
    be_stop
    fe_stop
    se_stop

Note

For sites using a multiple FE configuration, you must stop the BE server before stopping the FE servers.

11. Enter the following command to return to the SP installation directory, where <v> is the Primo version in which Primo 
    was first installed and <x> is the Primo copy:
    
    cd /exlibris/primo/p<v>_<x>/service_pack_install
12. Enter the following command to install the SP:

```
nohup ./sp.install
```

**Note**

For non-active BO servers in a multiple BO configuration, use the following command instead:

```
nohup ./sp.install -i
```

After the server checks some conditions (such as database access is available and Primo servers are down), the following message appears:

```
You are about to install Primo Service Pack <v>.<r>.<u>
Are you sure you want to continue? Y/[N]
```

13. Enter Y to continue.

The installation utility runs all mandatory implementation scripts automatically. They will take less than 5 minutes to complete. When complete, the following message displays:

```
The Service Pack was installed successfully.
The Service Pack utility - sp.utility - can be found on /exlibris/primo/p<v>_<x>/service_pack/sp.<v>.<r>.<u>
Do you want to run it now? Y/[N]
```

14. If you would like to run the manual implementation scripts now, enter Y. Otherwise, enter N and run them later using the `sp.utility` command. See Using the SP Utility.

**Note**

To determine which implementation scripts, if any, require you to run them manually, review the Release Notes and run the scripts that apply to your configuration. See Release Notes for more information.

15. If you are skipping Primo version 4.5 (for example, if you are upgrading from v4.4.1 to v4.7), open a new shell session when the upgrade process has finished in order to execute the updated startup scripts that are used in the remaining steps. Otherwise, continue to the next step.

16. Start all Primo servers (be_start, fe_start and/or se_start), as determined by the roles (BE, SE, and FE) supported on this server. For example, if the Primo server supports the BE, FE, and SE roles, enter the following commands:

```
be_start
fe_start
se_start
```
17. If the Apache server was stopped in step 7, enter the following commands to restart the Primo Apache server:

```
apcb
./apachectl start
```

18. If you need to conserve disk space, you can remove files under the following directory, but you will need to download the SP if you decide to roll back the SP and re-install it:

```
/exlibris/primo/primo/service_pack_install
```

**Note**

When port 80 is configured, you must use the following commands as the root user to start the Apache server:

```
cd /exlibris/primo/primo/apache/bin
./apachectl_auto
```

19. From the Primo Back Office home page, click **Deploy All** to complete the installation.
SP Installation Log File

Return to menu

The installation utility (sp.install) logs the details of the installation in the implementation_notes.log file. You may view this log file under the /exlibris/primo/p<v>_<x>/service_pack directory (where <v> is the Primo version in which Primo was first installed and <x> is the Primo copy).
Accessing the FTP Site

The FTP Site (ftp.exlibrisgroup.com) contains the SP files for the latest update. If you want to download the files directly from the FTP site, enter the URL into a web browser and log on to the FTP site with the following logon information:

**User:** primo4_sp  
**Password:** 4pgrade

Depending on the size of the update, the SP may require more than one tar file, which is indicated by a suffix of _aa, _ab, and so forth. Combine these tar files into a single tar file before running the installation utility (sp.install).

---

**FTP root at ftp.exlibrisgroup.com**

To view this FTP site in Windows Explorer, click Page, and then click Open FTP Site in Windows Explorer.

Welcome To Primo Sp Dir

- 11/17/2007 12:00AM 10,240 .RSRC
- 03/31/2008 09:10PM 10,486,760 PRIMO-1.4-ServicePack-5.tar.gz.xx
- 03/31/2008 09:10PM 10,486,760 PRIMO-1.4-ServicePack-5.tar.gz_ab
- 03/31/2008 09:08PM 8,011,019 PRIMO-1.4-ServicePack-5.tar.gz_ac
- 03/31/2008 09:08PM 159 primo_files_list
The Util SP Installation Method

This method is similar to the manual SP installation method, but it provides a menu-driven utility that simplifies the download and installation steps of the process. In addition, this utility allows you to download and install third-party product updates.

This section includes:

- [Installing the SP](#)
- [Installing Third-Party Product Updates](#)
Installing the SP

To install the SP using Util SP:

1. Log on to the server as the *primo* user.

   **Note**
   
   If your server has more than one copy of Primo, the system prompts you to select a copy.

2. Enter the following command to display Service Pack Management menu:

   ```bash
   util sp
   ```

   
   **SP. Service Pack Management**
   
   -----------------------------
   
   0. Exit Procedure
   1. Prepare/Update Environment
   2. Download latest SP
   3. Check SP Download status
   4. Install SP
   5. Run SP Utility (view implementation notes)
   6. Download 3rd party products update
   7. Check 3rd party product download status
8. Extract products updates
9. Update 3rd party soft links
10. Run Third party product OS pre checks

Please select [exit]:

Service Pack Management Menu (util sp)

3. Enter option 1 to configure your environment for the SP installation. For more information, see Preparing/Updating the Environment.

4. Enter option 2 to download the SP files from the FTP site to your Primo machine.

Note

◦ You will receive an email message when the download is complete. If you would like to monitor the download’s progress, refer to Checking the SP Download Status.

◦ To reduce some downtime, you may want to download the SP on all machines before continuing with the following steps.

5. Enter the following commands to stop the Primo Apache server:

   apcb
   ./apachectl stop

Note

If the Apache server is not running, you will see and can ignore the following error message:

   ./apachectl stop: httpd (no pid file) not running

6. If you have not already done so, stop all Primo servers (be_stop, fe_stop and/or se_stop), as determined by the roles (BE, SE, and FE) supported on this server. For example, if the Primo server supports the BE, FE, and SE roles, enter the following commands:

   be_stop
   fe_stop
   se_stop

7. Enter the following command to start the SP utility:

   util sp

8. When the download is complete, enter option 4 to install the SP files.
9. At the following prompt, enter Y to continue with the installation:

```
Download successful
getopt: invalid option -- h
Usage : sp.install -bfi
Checking Configuration status...
Checking Data Base status...
Checking Primo version...
The last installed Primo Service Pack number is 4.1.2
The last installed Primo Service Pack number on Back End machine is 4.1.2
Starting installation of Primo Service Pack
You are about to install Primo Service Pack 4.1.3
Are you sure you want to continue? Y/[N]
```

10. Once the SP files have been installed, you can perform the following steps in order to run the manual implementation scripts:

1. Enter option 5 in the Service Pack Management menu to open the SP Utility menu.

   For more information on sp.utility, see Using the SP Utility.

2. Enter option 2 in the SP Utility menu to open the Run Implementation Scripts submenu.

   For more information on running implementation scripts, see Running Implementation Scripts.

---

**Note**

To determine which implementation scripts, if any, require you to run them manually, review the Release Notes and run the scripts that apply to your configuration. See Release Notes for more information.

---

11. Before continuing with the next step, download and install the SP on the remaining Primo machines and copies in your topology.

12. Start all Primo servers (be_start, fe_start and/or se_start), as determined by the roles (BE, SE, and FE) supported on this server. For example, if the Primo server supports the BE, FE, and SE roles, enter the following commands:

    be_start
    fe_start
    se_start
13. If the Apache server was stopped in step 5, enter the following commands to restart the Primo Apache server:

```
apcb
./apachectl start
```

14. From the Primo Back Office home page, run **Deploy All** to complete the installation.

---

**Preventing/Updating the Environment**

The Environment Setting submenu allows you to configure parameters that are needed in order to install the SP. These configuration parameters include customer details, FTP settings, and download directory.

```
SP.1. Environment Setting
------------------------
0. Exit Procedure
1. Customer details
2. FTP settings
3. SP Download directory
4. View Parameters
Please select [exit]:
```

---

**Environment Settings Submenu**

To access this submenu, enter option 1 in the Service Pack Management menu.

---

**Updating Customer Details**

The SP Customer Details screen allows you to configure the customer parameters. For each parameter, the system prompts you for a new value. To keep the current value, type enter and continue with the next parameter.

---

**Note**

To prevent a startup failure, start the FE server before the SE server.

---

**Note**

When port 80 is configured, you must enter the following commands as the root user to start the Apache server:

```
apcb
./apachectl_auto
```
SP Customer details
--------------------------
Enter new values or press <enter> to keep existing</enter>
Ex Libris customer code (country code + customer) [972DAN]:
Customer mail address for download status notifications [leave empty for none]
[Dan. Perlman@exlibrisgroup.com]
If you want to change the language please type it now [english]:
(This is an option for future usage)
Configuration summary:
----------------------
Language: english
Customer code: 972DAN
Notification address: X.Y@exlibrisgroup.com
Press <enter> to continue</enter>

SP FTP settings
--------------------------
Enter new values or press <enter> to keep existing</enter>
Select FTP server number for SP download:
1) USA/Asia Pacific ftp.exlibris-usa.com

Note
After this script is run the first time, the system will create an sp.config file under the $primoe_root directory. This file should not be edited. If there is a need to modify it (such as for a special FTP condition), consult Ex Libris Support before implementing the change.

Updating FTP Settings

The SP FTP Settings screen allows you configure the parameters associated with the FTP server. For each parameter, the system prompts you for a new value. To keep the current value, type enter and continue with the next parameter.
2) HQ/Middle east ftp.exlibrisgroup.com
3) Europe ftp.exl.de
4) internal HQ il-ftp01
<enter> to keep current (ftp.exl.de)</enter>

FTP user for SP download [ver20_sp]:
FTP special options []:
*** for firewall connection problems try 'passive'
For details check the utility documentation

Configuration summary:
----------------------
FTP server: ftp.exl.de
FTP user: ver20_sp
FTP options:
If you want to insert new FTP password please type it now
Or press ENTER to keep current password
Press <enter> to continue</enter>

SP FTP Settings Screen

To access this screen, enter option 2 in the Environment Settings submenu.

Updating SP Download Directory

The SP Download Directory screen allows you configure the target directory for the downloaded SP files. Enter a new value or type enter to keep the current directory.

SP Download Directory
----------------------
Current SP Download directory is /exlibris/primo/p4_1/ng/primo/home/system/publish/service_pack_download
If you wish to change it enter the new path now
Press enter to keep current definition
Press <enter> to continue</enter>
To access this screen, enter option 3 in the Environment Settings submenu.

### Viewing Configuration Summary

The Configuration Summary screen displays the current configuration parameter settings.

```
configuration summary:
----------------------
FTP server: ftp.exlibrisgroup.com
FTP user: primo4_sp
FTP options:
Language: english
Service pack download dir: /exlibris/primo/p4_1/ng/primo/home/system/publish/service_pack_download
Customer code:
Notification address:
Press <enter> to continue</enter>
```

### Configuration Summary Screen

To access this screen, enter option 4 on the Environment Settings submenu.

### Checking the SP Download Status

This option allows you to check the integrity of the downloaded files and monitor the download progress.

If the download has not completed, you will receive a status message that is similar to the following message.

```
FTP still running
1 file(s) of total 5 completed (20 %)
person <enter> to continue</enter>
```

At the end of the download process, the system will send an email message that reports whether the process succeeded or failed. If it had failed, the message will contain the specific reason.
**Note**

If there is a delay between the SP download steps and the actual installation of the SP files, do not remove the SP download directory and the `$primoe_root/sp.config` file. Only edit this file with Util SP.
Installing Third-Party Product Updates

To install the third-party product updates:

1. Log on to the server as the *primo* user.

    **Note**

    If your server has more than one copy of Primo, the system prompts you to select a copy.

2. Enter the following command to display Service Pack Management menu:

   ```
   util sp
   ```

   **Service Pack Management Menu (util sp)**

   0. Exit Procedure
   1. Prepare/Update Environment
   2. Download latest SP
   3. Check SP Download status
   4. Install SP
   5. Run SP Utility (view implementation notes)
   6. Download 3rd party products update
   7. Check 3rd party product download status
   8. Extract products updates
   9. Update 3rd party soft links
   10. Run Third party product OS pre checks

   Please select [exit]:

3. Enter option 6 to download the latest available third-party product updates.

4. At the following prompt, enter the full path of the FTP directory or type enter to keep the current directory:
The third party download utility will use wget to download the required packages.
Download directory will be /exlibris/ftp_from_exlibris
If you want to change it please enter the new path now or <enter> to keep.

5. Enter option 7 to check the status of the download. Do not continue with the next step until the download completes.

6. Enter option 8 to extract the downloaded product files from the FTP site to your Primo machine. The system will install all of the products in the following directory:
   /exlibris/ftp_from_exlibris

7. Enter option 10 to make sure that all OS packages needed for normal operation of the updated third-party products are installed.

   **Note**
   It is recommended that this check is run after the download completes and before the third-party products are installed. If any OS packages are missing, ask your local IT staff to install them.

8. Enter option 9 to install the third-party product.
   This option replaces the soft links to the current third-party products with soft links to the to the new installation of the third-party products.
   Before running this step, make sure that you shut down the Apache and perform Primo_shutdown.
Hot Fixes

Patches that are released between service pack releases are called hot fix packages. A hot fix package is normally released in the same way as service packs. On some occasions, hot fix packages are released internally to Support representatives who contact customers to coordinate specific hot fix package installations.

This section includes:

- [Installing Hot Fixes](#)
- [Rolling Back Hot Fixes](#)
Installing Hot Fixes

This section contains the procedure to apply hot fixes.

Note

- If your site does not have multiple BO and FE machines and you prefer to install the hot fixes automatically, use the instructions provided in section The Automatic SP Installation Method.
- Each Hot Fix package includes all fixes provided in previous Hot Fix packages.
- For special instructions on installing a hot fix package, enter the following commands to view the README file:

```
cd /exlibris/primo/p<v>_<x>/service_pack_install/primo_hotfix.<v>.<date>
vi README
```

<v> is the Primo release, <x> is the Primo copy, <v> is the full Primo version (such as v3.0.2), and <date> is the build date of the hot fix package.

To install the Hot Fix package:

1. Log on to the server as the primo user.
2. Enter the following command to move to the SP installation directory, where <v> is the Primo version in which Primo was first installed and <x> is the Primo copy:

   ```
   cd /exlibris/primo/p<v>_<x>/service_pack_install
   ```

3. Enter the following commands to download the hot fix package from the FTP Site, where <v> is the current Primo version, <x> is the minor release number, <y> is the update number, and <date> is the build date of the hot fix package. When prompted, use primo_hf3 for the user and 4pgrade for the password.

   ```
   ftp ftp.exlibrisgroup.com
   bin
   prompt off
   mget PRIMO-<v>..<x>-HotFix-<y>.<date>.tar.gz_*
   quit
   ```

4. Enter the following commands to stop the Primo Apache server:

   ```
   apcb
   ./apachectl stop
   ```
5. Stop all Primo servers (be_stop, fe_stop and/or se_stop), as determined by the roles (BE, SE, and FE) supported on this server. For example, if the Primo server supports the BE, FE, and SE roles, enter the following commands:

be_stop
fe_stop
se_stop

Note

For sites using a multiple FE configuration, you must stop the BE server before stopping the FE servers.

6. Enter the following command to return to the SP installation directory:

cd /exlibris/primo/p<v>_<x>/service_pack_install

7. Enter the following commands to run the hot fix package, where <v> is the current Primo version, <x> is the minor release number, <y> is the update number, and <date> is the build date of the hot fix package:

```
cat PRIMO-<v>.-<x>-HotFix-<y>.<date>.tar.gz * > PRIMO-<v>.-<x>-HotFix-<y>.<date>.tar.gz
tar -xzvf PRIMO-<v>.-<x>-HotFix-<y>.<date>.tar.gz
./hf.install
```

8. Start all Primo servers (be_start, fe_start and/or se_start), as determined by the roles (BE, SE, and FE) supported on this server. For example, if the Primo server supports the BE, FE, and SE roles, enter the following commands:

be_start
fe_start
se_start

Note

To prevent a startup failure, start the FE server before the SE server.

9. If the Apache server was stopped in step 4, enter the following commands to restart the Primo Apache server:

```
apcb
./apachectl start
```
10. If you need to conserve disk space, you can remove files under the following directory, but you will need to download the SP if you decide to roll back the SP and re-install it:

   /exlibris/primo/p<version>_x/service_pack_install

   Do not remove files in the /exlibris/primo/p<version>_x/service_pack directory.

11. From the Primo Back Office home page, click Deploy All to complete the installation.

**Note**

When port 80 is configured, you must use the following commands as the root user to start the Apache server:

   cd /exlibris/primo/p3_1/primoe/apache/bin

   ./apachectl_auto
Rolling Back Hot Fixes

This section contains the procedure to roll back the hot fix to the previous version.

To roll back the hot fix package:

1. Enter the following commands to stop the Primo Apache server:
   ```
   apcb
   ./apachectl stop
   ```

   **Note**
   
   If the Apache server is not running, you will see and can ignore the following error message:
   ```
   ./apachectl stop: httpd (no pid file) not running
   ```

2. Stop all Primo servers (`be_stop`, `fe_stop` and/or `se_stop`), as determined by the roles (BE, SE, and FE) supported on this server. For example, if the Primo server supports the BE, FE, and SE roles, enter the following commands:
   ```
   be_stop
   fe_stop
   se_stop
   ```

   **Note**
   
   For sites using a multiple FE configuration, you must stop the BE server before stopping the FE servers.
   ```
   cd /exlibris/primo/p<ver>_<x>/service_pack/hf.<ver>_<date>
   ```

3. Enter the following commands to start the Hot Fix utility, where `<date>` is the build date of the hot fix package and `<ver>` is the update version (such as 3.0.2):
   ```
   cd /exlibris/primo/p<ver>_<x>/service_pack/hf.<ver>_<date>
   ./hf.utility
   ```

4. To roll back the hot fix, enter option 9.
5. Start all Primo servers (`be_start`, `fe_start` and/or `se_start`), as determined by the roles (BE, SE, and FE) supported on this server. For example, if the Primo server supports the BE, FE, and SE roles, enter the following commands:

- `be_start`
- `fe_start`
- `se_start`

**Note**

To prevent a startup failure, start the FE server before the SE server.

6. If the Apache server was stopped in step 1, enter the following commands to restart the Primo Apache server:

- `apcb`
- `./apachectl start`

**Note**

When port 80 is configured, you must use the following commands as the root user to start the Apache server:

- `cd /exlibris/primo/p3_1/primoe/apache/bin`
- `./apachectl_auto`
Using the SP Utility

This section includes:

- Overview of the SP Utility
- Running Implementation Scripts
- Rolling Back the SP
Overview of the SP Utility

During the installation of the SP, the install script automatically runs the mandatory implementation scripts to update your Primo servers.

Installation scripts, which are dependent on your Primo topology or configuration, cannot be performed by the installation script. These scripts, if any, require you to run them manually via the `sp.utility` command, which is located under the following directory, where `<v>` is the Primo version in which Primo was first installed, `<r>` is the minor release, `<x>` is the Primo copy, and `<u>` is the SP number:

```
/exlibris/primo/p<v>_<x>/service_pack/sp.<v>.<r>.<u>
```

To determine if any implementation scripts require you to run them manually, review the Release Notes and run the scripts that apply to your configuration.

---

**Note**

Although the scripts are optional, the benefit of some updates may not be in effect until you run the scripts.

---

From the main menu (see SP Utility - Main Menu) of the SP Utility, you can perform the following tasks:

- Run implementation scripts
- Roll back the SP

```plaintext
Welcome to Service Pack utility.

Your current Service Pack is 2.0.1.

0. Exit Procedure
2. Run Implementation Scripts
9. Rollback

Please select [0]:
```

**SP Utility - Main Menu**
Running Implementation Scripts

From the Run Implementation Scripts menu (see SP Utility - Run Scripts Menu) of the SP Utility, you can run optional scripts all at once or individually by specifying a script number, indicated by the Issue ID column in the Release Notes.

<table>
<thead>
<tr>
<th>Run Implementation Scripts</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Exit Procedure</td>
</tr>
<tr>
<td>1. Run a specific installation script</td>
</tr>
<tr>
<td>2. Run all implementation scripts automatically</td>
</tr>
</tbody>
</table>

Please select [0]:

SP Utility - Run Scripts Menu

Running All Installation Scripts

To install all implementation scripts:

1. Enter option 2 from the Run Implementation Scripts menu.

2. At the following prompt, enter the SP number:

   Please enter the number of service pack you want to start with automatic run:

3. At the following prompt, enter any key to continue:

   Implementation script run ended - press any key to continue

4. Enter option 0 to exit the menu.

Running Specific Installation Scripts

To install a specific implementation script:

1. Enter 1 from the Run Implementation Scripts menu. The following prompt displays:
Enter the service pack number to which the script belongs (e.g. enter "5" for 1.2.5):

2. Enter the SP number. The following prompt displays:

   Enter the number of the defect number whose script you want to run:

3. Enter the defect number for which you want to run the implementation script. The SP utility displays the status. For example, the status of implementation script 2368 displays as follows:

   You chose to run implementation script 2368 of service pack 6
   >>>> Now running implementation script 2368 of service pack 6
   Implementation script 2368 of service pack 6: updates the OpenURL templates
   >>>> Implementation script 2368 of service pack 6 execution finished successfully
   Thu Nov 29 16:23:20 IST 2007
   Implementation script run ended - press any key to continue

4. Enter any key to continue.

5. Enter 0 to exit the menu.
Rolling Back the SP

The rollback option from the main menu (see SP Utility - Main Menu) of the SP Utility returns the installation to the previous SP. To roll back the SP, enter option 9.

**Note**

You must stop the Apache, BE, FE, and SE servers before rolling back the SP.

To reinstall the SP, you must use the `sp.install` command.