

Release Note (Mar, 2019)

File Manager Version 3.1.5

[About File Manager]

- File Manager is an application software to perform file-management with the Optical Disc Archive System (ODS), ODS-L10 or ODS-L30M.

[Important Notice]

- File Manager 3.1.5 supports Optical Disc Archive Software Version 4.4.1.
 - Any earlier version than Optical Disc Archive Software 4.4.1 does not support File Manager 3.1.5. Please upgrade your current Optical Disc Archive Software to version 4.4.1.
- When you update your current version to the latest, uninstall the current one and install 3.1.5, and then please start Library Software Configuration Tool again. If you do not perform Library Software Configuration Tool, some new features will not work properly.

[Main Features of File Manager]

- File Manager controls ODS-L10 or ODS-L30M and manages to archive and retrieve files.
 - File Manager supports the configuration; ODS-D55U, ODS-D77U and/or ODS-D280U are directly connected to the control PC.
- File Manager searches Optical Disc Cartridges in shelves, as well as cartridges in ODS-L10 or ODS-L30M.

[Fixes with Version 3.1.5]

- Fixed a bug that notification email is not sent to a registered email address when reissue new password from the login page.

[New features in Version 3.1.4]

- Added "all" to search type
- Improved performance in archiving and retrieving when using an MD5 checksum
- Added firewall setup instruction to strengthen security in the installation guide. We recommend customers to setup firewall to strengthen security.

[Fixes in Version 3.1.3]

- Fixed a bug that registered, jobs of volume duplication keep waiting and could not be processed in the PetaSite system with three or more drives in File Manager 3.1.0 to 3.1.2. Especially for PetaSite system with three or more drives, please update to this V3.1.3.

[New features in Version 3.1.2]

- Disc spanning suppression of Volume duplication
 - Suppress recording a single file spanning multiple discs as much as possible when volume duplicating.
- Improved reregistration of failed jobs so that enable to change conditions.
 - Allows you to modify conditions and then reregister a job. You can reregister all jobs or only those jobs that failed. You can change the archive destination or retrieve destination.

[New features in Version 3.1]

- Volume duplication
- Improved performance in retrieving

[New features in Version 3.0.2]

- Prevent long-term loading of cartridges

[New features in Version 3.0.1]

- Support ODS-D280U, ODS-D280F
- Support ODC3300R
- Exporting a catalog data
- Reregistration of Job Group
- Exporting a job report

[New features in Version 2.6]

- Support Windows 10

[New features in Version 2.5]

- Synchronization with library information of ODS-L30M
- Support Microsoft Edge

[New features and Improvements in Version 2.4]

- Improved performance in archiving and retrieving
- Processing retrieve job interrupts
- Displaying folder path

[Improvements with Version 2.3]

- Improved performance in archiving and retrieving

[New features in Version 2.2]

- Support ODS-L30M
- Adding network drives via UNC network path
- Creating folders in cartridge
- Displaying MD5 checksum value
- Support Windows Server 2008 R2, 2012, 2012 R2

[New features in Version 2.0]

- File Manager supports new configuration; ODS-D55U and/or ODS-D77U are directly connected the control PC, without ODS-L10 library. It is called "Direct Mode".
- Database backup / import
- Copy verification by collating files using MD5 checksum
- Automatic archiving by Watched Folder Archive
- Mail notification feature when archiving or retrieving have finished
- Support Windows 7, 8.1 64bits
- Support new Web Browsers, Internet Explorer and Mac Safari (The versions are described column at [Web Browser])

[Notes on upgrades]

- Even when you uninstall the previous version before installing V3.1.5, database is migrated to V3.1.5 because File Manager uninstaller does not delete user data.
 - After you upgrade to V3.1.5, please do Library Software Configuration Tool again.
 - However, when you uninstall the previous version completely, and delete the database and metadata, then V3.1.5 installer cannot translate the database from the previous version to V3.1.5.
 - Please do not shut down the computer during the installation.
- In case you already installed any beta version, uninstall the beta version completely, and then install V3.1.5 official version. About "uninstall completely", please refer to Uninstall section in this document.
- Migration of database and metadata from the previous version to V3.1.5 is possible: Make a backup copy of data on the previous version, and restore the data on V3.1.5.
 - If the system configuration is changed, please perform Library Software Configuration Tool again.
- Database and metadata used on V3.1.5 cannot be used on the previous version.
 - Backup data made on V3.1.5 cannot be restored on the previous version.

[Control PC OS support]

<Connecting to ODS-L10 or ODS-D55U/ODS-D77U>

- Microsoft Windows 7 64bit Professional, Enterprise, Ultimate
- Microsoft Windows 8.1 64bit Pro, Enterprise
- Microsoft Windows 10 64bit Pro, Enterprise
- Microsoft Windows Server 2008 R2 Standard, Enterprise
- Microsoft Windows Server 2012 Standard
- Microsoft Windows Server 2012 R2 Standard
- Microsoft Windows Server 2016 Standard

< Connecting to ODS-L30M>

- Microsoft Windows Server 2008 R2 Standard, Enterprise
- Microsoft Windows Server 2012 Standard
- Microsoft Windows Server 2012 R2 Standard
- Microsoft Windows Server 2016 Standard

[Web Browser]

<Windows>

- Google Chrome, Microsoft Internet Explorer 9, 10, 11 or Microsoft Edge

<Mac>

- Google Chrome or Apple Safari 7, 8, 9, 10

[Supported Devices]

- Optical Disc Archive Drive Unit
 - Use File Manager 3.1.5 for ODS-D280U or ODS-D280F.
 - File Manager 2.6 or earlier does not support ODS-D280U, ODS-D280F.
 - File Manager 1.0、2.0 does not support ODS-D77F.
 - File Manager 1.0 does not support ODS-D77U.
- Optical Disc Archive Software Version 4.4.1

- Any earlier version than version 4.4.1 does not support File Manager 3.1.5. Please upgrade your current one to version 4.4.1.
- While File Manager is running, Optical Disc Archive Filer included with Optical Disc Archive Software cannot be launched. Terminate File Manager service first, and then start Optical Disc Archive Filer.
- Optical Disc Archive 10-Slot library (ODS-L10) Version 1.05
 - File Manager 1.0 does not support ODS-D77U in ODS-L10. When you use ODS-D77U in ODS-L10, please use File Manager 2.0 or later.
- PetaSite Master Unit (ODS-L30M), PetaSite Drive Extension unit (ODS-L60E), PetaSite Cartridge Extension units (ODS-L100E) Version 2.10
- Please use the following combination of the versions.

File Manager	3.1.5
Optical Disc Archive Software	4.4.1
ODS-D55U/F	1.30
ODS-D77U/F	2.10
ODS-D280U/F	2.30
ODS-L10	1.05
ODS-L30M/ODS-L60E/ODS-L100E	2.20

For further information on each version, please contact Sony service representatives.

[Required Software]ⁱ

The installer of File Manager installs the following software automatically.

- Apache Tomcat 7.0 Tomcat 7
- MySQL 5.7
- Java 8 Update 202 (64bit)

[Installation]

<Download>

- Please download the installer from the Sony professional product site.
 - The installer is provided in the form of "ODAFileManager_3_1_3.zip".

<Procedures>

- When you have already installed the previous version of File Manager, please uninstall ODAFileManager by using "Program & Features" in Control Panel. File Manager installer does not support upgrade installation.
- To start the installer of File Manager, please double-click the installer and proceed with the installation according to the instructions.
- After installation, please execute Library Software Configuration Tool and configure the File Manager.

<Activation>

- A set of serial number, necessary for the authentication, is supplied with each Optical Disc Archive Library (ODS-L10). A set of serial number can be used to activate File Manager on a single computer.
- The serial number used for activating the previous version of File Manager can be used in File Manager 3.1.5.

- When you would like to use File Manager with ODS-L30M or you use Optical Disc Archive Drives using with File Manager as "Direct Mode", please purchase serial number(s) from the Sony professional product site. Also when you need additional licenses, please purchase serial number.

[Note on Use]

1. About this application

- If a web-service-based application other than File Manager has been installed, File Manager may not work properly.
- While File Manager is running, Optical Disc Archive Filer included with Optical Disc Archive Software cannot be launched. Terminate File Manager service first, and then start Optical Disc Archive Filer.
- File Manager will not work properly if using Bulk Import in ODS-L30M. Please set Bulk Import to OFF.
- When you set Fast Load to ON in ODS-L30M setting, a cartridge can be moved before the previous cartridge imported into a drive has finished loading, reducing the net time required to move a cartridge to a drive.
- When less space than 3GB is left on a drive or device used with this application, this application may stop the system for the sake of safe operations. In that case, please increase the free space and operate again.

2. Installation

- Please do not shut down the computer during the installation.
- Reactivation may be required after hardware configuration changes. In that case, please activate again with the same serial number you have already registered.
- The existing database and metadata can be used even for after a new installation, unless you do not delete the database by uninstalling the application completely.
- When you use a multi-card reader, you may fail to install File Manager. Please install File Manager after disabling the Multi-Card Reader by Windows Device Manager.

3. Network settings

- This application could be accessed by any unintended third party on the network, depending on a usage environment. Please connect to a secure network.
- When you access to the control PC from client PCs, please pay attention to the TCP port 8080 inbounds. Some Internet security software, such as anti-virus software, may block 8080 inbound. If this is the case, please make settings so that they access 8080 inbounds.
- If you use a proxy server in a Local Area Network (LAN), please bypass the proxy server for local addresses.
 - In the Local Area Network (LAN) settings of the Web Browser, please select the "Bypass proxy server for local addresses" check box.
- This application may not work properly depending on the status of network connections.

4. Web Browser

- This application does not support Internet Explorer 8.
- This application does not operate properly when Compatibility View is turned on in Internet Explorer 9, 10, 11.

- This application may take long time to display some pages on Internet Explorer depending on the performance of the computer. In that case, please use Google Chrome.
- In Chrome, some extensions block requests. When you use such kind of extensions, File Manager application does not work properly.
- This application may not work properly depending on the browsing history. If this is the case, please delete the browsing history and restart this application.
- It is recommended to use the latest version of Web Browser.

5. Network drives

- This application may not work properly depending on the state of the network drive.
- When you add a network drive to base path, please do not select a network drive mapped by Windows Explorer. Please add a network drive in UNC format (e.g. \\server_name\folder).
- When you add a network drive to base path, please do not select a computer name only (e.g. "\\server_name") or an IP address only (e.g. "\\xxx.xxx.xx.xx"). In such a case, please enter the shared folder name with server name or IP address, (e.g. "\\server_name\shared_folder" or "\\xxx.xxx.xxx.xxx\shared_folder").
- When you add a root folder of network drive to base path, you cannot archive whole content of the folder (e.g. "\\server_name\folder", "\\xxx.xxx.xx.xx\folder").
- Immediately after you delete a path of a network drive, you may not be able to add a folder having the same IP address. Please add the folder again after a brief interval.
- The network drive may not be used properly if the user name and the password are not set depending on the security setting of the network drive.

6. About Exporting a catalog data

- In Chrome, some characters of file name for export files may be converted to other characters.

7. About Watched Folder Archive

- Please do not select a folder on a write-protected drive, XDCAM or XDCAM Server.
- Files in the watched folder will be deleted after archiving.
- Folders in the watched folder will not be deleted automatically. They need to be deleted manually.
- Read-only files created under watched folder cannot be archived.
- Watched Folder Archive may not work properly when you copy files to the watched folder in other operating environments than Windows OS.

8. About Formatting and Finalizing Cartridge

- Formatting and Finalizing a cartridge may fail when another process is using the cartridge. Please end the process which is using the cartridge and then format or finalize again.

9. About Backup and Restore

- Please do not exit this application while restoring data. When you exit this application while restoring data, please restart the computer.
- Please do not shut down the computer while restoring data. When the computer shuts down while restoring data, please uninstall completely and re-install this application, and then restore the data again.

10. Administrator password

- If you forget your password, the password can be reissued to the e-mail address registered in the mail notification settings.
- If mail notification setting is not enabled, please reinstall File Manager after performing a complete uninstallation.
(Please note that the metadata and the database are deleted by uninstalling the application completely.)

11. Java update

- Please do not update the Java.

12. Uninstallation

- You can uninstall this application in two different ways:
 - Uninstall the software by Windows
 - Completely unistall the software (uninstall the software and delete all data)
- Database and metadata generated by this application will not be removed even if you uninstall the application by "Programs & Features" in Windows Control Panel.
- When you uninstall this application completely, the database and metadata created on this application will be deleted.
- Please contact our service representatives for the way to uninstall completely.

13. About preventing long-term loading of cartridges

- The cartridges may be accessed, depending on the software installed on the computer, even if you do not intentionally read or write. This may be lead to early replacement of the optical head or may adversely affect the media. Therefore, when using ODS - L 10 or ODS - L 30 M, cartridges that have not been used for a certain period of time are automatically moved from the drive to the slot to prevent long - term loading of cartridges.

14. Others

- Please restart the computer whenever you change your computer's time or time zone.
- File Manager may not work properly when several users simultaneously log on the computer on which File Manager is installed.
- This application may not work properly when the computer goes to a sleep mode.
- The folders including inaccessible folders or files may not be archived properly.
- When a filepath is too long, the file may not appear on UI.
- When too many files or folders are requested for archive or retrieve all at once, this application may not register the jobs properly or display a list of the jobs properly depending on the performance of the computer or the status of the network.
- When too many files or folders are added to the Placeholder, this application may fail to add the files or folders properly depending on the performance of the computer or the status of the network.
- When you add a local disc drive to base path, you cannot archive whole content of the root folder.
- When you retrieve data to XDCAM, the retrieve may be failed because the file format may be changed automatically. In that case, please uncheck "Enable strict file compare when retrieving", and then retrieve the data to XDCAM.

- When you changed hardware configuration(especially when USB connections of ODS-D55U or ODS-D77U in ODS-L10 are changed), please perform Library Software Configuration Tool again.
- If you get logs simultaneously by File Manger and Optical Disc Archive Utility, it may not work properly, so please refrain from getting logs simultaneously.
- Even if you cancel volume duplication, copying may be completed.

[HTTPS Communications Settings]

Communications can be encrypted by setting HTTPS communication.

Generating a keystore file

1. Launch [Command Prompt].
2. Enter the following command.

```
cd C:\Program Files\Java\jre*.*)_***\bin
keytool -genkey -alias tomcat -keyalg RSA -keysize 2048 -keystore <keystore_filename>
```

Example keystore file name: filemanager2.keystore

3. Enter a password when prompted to set a keystore password.

```
Enter keystore password: *****
(Password is not displayed)
```

4. Enter the same password again when prompted to do so.

```
Re-enter new password: *****
(Password is not displayed)
```

5. Enter information for the certificate signing request (CSR).

Input example:

```
What is your first and last name?
[Unknown]: www.sony.jp
What is the name of your organizational unit?
[Unknown]: File Manager2
What is the name of your organization?
[Unknown]: Sony Imaging Products & Solutions Inc.
What is the name of your City or Locality?
[Unknown]: Minato-ku
What is the name of your State or Province?
[Unknown]: Tokyo
What is the two-letter country code for this unit?
[Unknown]: JP
```

6. Check the displayed contents of the entered information, and then enter "yes".

```
Is CN=www.sony.jp, OU=File Manager2, O=Sony Imaging Products & Solutions Inc.,  
L=Minato-ku, ST=Tokyo, C=JP correct? [no]: yes
```

7. Press the Return (Enter) key without entering anything when the following prompt appears.

```
Enter key password for (RETURN if same as keystore password):
```

A keystore file with the name specified in step 2 is generated.

Generating a CSR

1. Launch [Command Prompt].
2. Enter the following command.

```
cd C:\Program Files\Java\jre1.8.0_161\bin  
keytool -certreq -sigalg SHA1withRSA -alias tomcat -file <CSR_filename> -keystore  
<keystore_filename>
```

Example CSR file name: filemanager2.csr

3. Enter the password specified when generating the keystore file when prompted.

```
Enter keystore password: *****
```

A CSR file with the name specified in step 2 is generated.

Issuing a server certificate

Pass the generated CSR to a certificate authority to have a signed server certificate issued.

Generating a server certificate used by applications

1. Place the signed server certificate and intermediate certificate in an arbitrary directory.
2. Launch [Command Prompt].
3. Merge the signed server certificate and intermediate certificate into a single file.

```
copy <signed_server_certificate_filename> + <Intermediate_certificate_filename>  
<server_certificate_filename_used_by_applications>
```

Example server certificate file name used by applications: filemanager2.cer

Installing a certificate

1. Enter the following command.

```
keytool -import -alias tomcat -keystore <keystore_filename> -file  
<filename_generated_in_step3_previous_section>
```

2. Enter the password specified when generating the keystore file when prompted.

```
Enter keystore password: *****
```

3. Enter "yes" if the following prompt appears.

```
Top-level certificate in reply:
Owner: CN=*****, O=*****, C=**
Issuer: OU=*****, O=*****, C=**
Serial number: *****
Valid from: ***** until: *****
Certificate fingerprints:
MD5: *****
... is not trusted. Install reply anyway? [no]: yes
```

Asterisks indicate the display of registered information.

Enabling HTTPS

1. Stop the Tomcat service.
 - ① From the [Start] menu, click [Windows Administrative Tools] > [Services].
 - ② Search for and click the "Apache Tomcat" service in the list of services.
 - ③ Click [Stop the service] on the left side of the list of services.
2. Edit the Tomcat configuration file (server.xml).
 - ① Open C:\Program Files\Apache SoftwareFoundation\Tomcat 7.0\conf\server.xml, and uncomment the block at line 85.
 - ② Copy the content shown below in "After editing."
 - ③ Enter the full path of the actual keystore file in <keystore_filename>, and enter the password specified when generating the keystore file in <keystore_password>.

Before editing

```
<!--
<Connector port="8443" protocol="HTTP/1.1" SSLEnabled="true"
    maxThreads="150" scheme="https" secure="true"
    clientAuth="false" sslProtocol="TLS" />
-->
```

After editing

```
<Connector port="8443" screen is displayed.
  protocol="org.apache.coyote.http11.Http11Protocol"
  SSLEnabled="true"
  maxThreads="150"
  scheme="https"
  secure="true"
  keystoreFile=" <keystore_filename> "
  keystorePass=" <keystore_password> "
  clientAuth="false"
  sslProtocol="TLSv1.2"
  sslEnabledProtocols="TLSv1.1,TLSv1.2"
  ciphers="TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384,
    TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384,
    TLS_ECDH_RSA_WITH_AES_256_GCM_SHA384,
    TLS_ECDH_ECDSA_WITH_AES_256_GCM_SHA384,
    TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256,
    TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256,
    TLS_ECDH_RSA_WITH_AES_128_GCM_SHA256,
    TLS_ECDH_ECDSA_WITH_AES_128_GCM_SHA256,
    TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384,
    TLS_ECDHE_ECDSA_WITH_AES_256_CBC_SHA384,
    TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA,
    TLS_ECDHE_ECDSA_WITH_AES_256_CBC_SHA,
    TLS_ECDH_RSA_WITH_AES_256_CBC_SHA384,
    TLS_ECDH_ECDSA_WITH_AES_256_CBC_SHA384,
    TLS_ECDH_RSA_WITH_AES_256_CBC_SHA,
    TLS_ECDH_ECDSA_WITH_AES_256_CBC_SHA,
    TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256,
    TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SHA256,
    TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA,
    TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SHA,
    TLS_ECDH_RSA_WITH_AES_128_CBC_SHA256,
    TLS_ECDH_ECDSA_WITH_AES_128_CBC_SHA256,
    TLS_ECDH_RSA_WITH_AES_128_CBC_SHA,
    TLS_ECDH_ECDSA_WITH_AES_128_CBC_SHA"
/>
```

To prevent HTTP communications, comment out the block at line 70 as follows.

Before editing

```
<Connector port="8080" protocol="HTTP/1.1"
  connectionTimeout="20000"
  redirectPort="8443"
  useBodyEncodingForURI="true" />
```

After editing

```
<!--  
<Connector port="8080" protocol="HTTP/1.1"  
    connectionTimeout="20000"  
    redirectPort="8443"  
    useBodyEncodingForURI="true" />  
-->
```

3. Start the Tomcat service.
 - ① From the [Start] menu, click [Windows Administrative Tools] > [Services].
 - ② Search for and click the "Apache Tomcat" service in the list of services.
 - ③ Click [Start the service] on the left side of the list of services.
4. Run the Config Tool.
5. Check the HTTPS communication.

Launch a web browser and access "https://<domain_name>:8443" and check that the login <Connector port="8443" screen is displayed.

[Trademarks]

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- Google Chrome is registered trademarks or trademarks of Google Inc.
- Java and all trademarks and logos related to Java are registered trademarks of Oracle Corporation and its affiliates in the United States and other countries.
- Tomcat is a trademark of the Apache Software Foundation.

ⁱ Please refer to the following web page for relevant bug fix information.

Apache Tomcat: <http://tomcat.apache.org/>

MySQL: <http://www.mysql.com/>

Java: <http://java.com/>