Adobe® Marketing Cloud

Using FTP and sFTP with the Adobe Marketing Cloud

Contents

File Transfer Protocol

Learn how to use FTP and SFTP to transfer files between computers and servers.

Ways you can use FTP with Adobe solutions and products:

- Upload large classification data sets to Analytics.
- Upload customer attributes to the Marketing Cloud for use in solutions.
- Use Analytics to create and manage FTP-based Data Sources, which leverages FTP file transfer to import offline or historical data into the **Marketing Cloud**

This article does not necessarily take you through the steps of using FTP with each product. Instead, it recommends best practices for using FTP with Adobe.

Setting Up FTP Accounts Hosted by Adobe

Set up and use Adobe-hosted FTP accounts.

Adobe maintains highly available, high-performance FTP clusters that are specifically designed to improve file transfer reliability, while continuing to ensure high performance.

Adobe customers receive maintenance notifications through their standard process, as maintenance events are scheduled. To ensure that the Adobe FTP systems function as designed and continue to provide secure and reliable, high performance data transfer, Adobe requests adherence to the following guidelines:

- Most Adobe FTP accounts (classifications, Data Sources, and others) are enabled automatically when the given feature is set up. For Data Feed and general file delivery accounts, Adobe Customer Care can set up a new FTP account for you. This process is in place to ensure both security and space available for the FTP account.
- Users should remove data delivered by Adobe to the FTP account after the data has been successfully transferred to their systems.
- Notify Adobe when FTP accounts are no longer needed so they can be deactivated.

The Adobe FTP host name is `ftp.omniture.com` or `ftp2.omniture.com`.

This information, along with a username and password, should be provided either within the **Marketing Cloud** (for classifications and Data Sources), or by the Adobe representative responsible for setting up the account at your request. If you do not know what FTP address to use, contact your Adobe Account Manager, who can provide the correct address. In addition, for classifications and Data Sources accounts, Adobe does not have a specific time of day that FTP files are processed. Instead, Adobe uses a script that constantly polls FTP accounts for new files process. Files uploaded into these accounts are processed as quickly as possible.

Classifications

The classifications (SAINT) FTP option provides more flexibility in uploading large classification data sets, including the ability to upload data into multiple report suites and to upload data sets larger than 50,000 rows.

See *classifications* for steps on how to download classification data via FTP and how to upload data files via FTP (including the steps to create an FTP account).

The amount of time required for the system to import these files varies, based on a number of factors. If an uploaded file is still present on the FTP server after six hours, work with your organization's supported users to contact Adobe Customer Care.

A successful import immediately shows the appropriate changes in an export, while the data changes in Analytics may take up to four hours with a browser import and up to 24 hours with an FTP import.

For information on FTP limits and data retention, see *FTP Limits and Data Retention*.

About the .fin File for Classifications and Data Sources Uploads

When you upload a classification or **Data Source** file (`.tab` or `.txt`) the upload also requires that you upload an empty file with the exact same name as the data file being imported, but with a `.fin` extension. This `.fin` file is a finish file. The purpose of the file is to tell the system that the data file has been completely uploaded to the FTP account. The `.fin` file lets Adobe recognize that you are done with your import. After you submit it, Adobe removes both files off of the FTP and begins processing the import.

Example:

Import File: `Classifications.tab`

Finish File: `Classifications.fin`

If you upload your Data Sources or classification file without an accompanying `.fin` file, Adobe does not add it to the queue for processing. The file remains on the FTP, and is not applied to your data in the **Marketing Cloud**. You are notified of this only if you have entered your email address as the **Notification Recipient** in the **Create FTP Account** window of Analytics. If no email address is entered in this field, no notification is sent.

If you do upload your file with a `.fin` file, but there is an error in the file, it is submitted for processing, but the error causes the processing to cease and the file to be sent to an error folder. If this occurs, a notification is sent to the email address listed in the **Notification Recipient** field in the **Create FTP Account** window. If no email address is entered, no notification is sent.

Data Sources

You can use Analytics to create and manage FTP-based Data Sources, which leverages FTP file transfer to import offline or historical data into the **Marketing Cloud**.

After creating a Data Sources instance, the tool provides an FTP location that you can use to upload Data Sources files. Once uploaded, Data Sources automatically locates and processes them. After the files are processed, the data is available for Analytics reporting.

The **Create** tab in the Data Sources Manager lets you configure a new Data Sources instance for the selected report suite. The **Data Sources Wizard** guides you through the process of creating a Data Sources template, and creates an FTP location for uploading data.

In the **Manage Data Sources** window, find your data source and select the FTP Info link. Your FTP login information is displayed in the **Activate a Data Source** window in the **Upload/FTP Information** section.

For information on FTP limits and data retention, see *FTP Limits and Data Retention*.

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Data Connectors

When you create an integration with an Adobe partner using data connectors, Adobe can push re-marketing or other data to an FTP account, which you or the partner can download.

The expectation is that you manage the files on the FTP account to ensure that the integration has enough space on the FTP account to receive the data submitted to it by Adobe. This type of FTP account allows a maximum of 2 GB or 63 files.

For information on FTP limits and data retention, see *FTP Limits and Data Retention*.

Data Feeds

Data Feeds are an export of the clickstream data received by Adobe that offers both standard and custom **Data Feeds**.

If you have purchased Adobe data warehouse, **Standard Data Feeds** can be set up through your Adobe Account Manager. They can be sent to any FTP account (either one set up by Adobe or an external FTP). Adobe Engineering Services offers custom **Data Feeds** that can be sent by virtually any means.

Data Feed FTP accounts allow 2 GB or 63 files (by default). All other standard FTP accounts are 50MB by default. In cases where clients are using the FTP account for its proper intended use, some users with high traffic amounts can quickly fill up these accounts. When an FTP account is full, no additional files can be pushed to them. Therefore, any files being delivered to that FTP account (**Data Feeds**, data warehouse requests, and so forth) are not delivered. This is one reason it is important to manage your Adobe FTP account by removing files that have been received and downloaded.

When an FTP account is full, you should download and remove the current files, and let Adobe know the space has been cleared. Adobe can then resend files that have not been delivered. Some tools, such as data warehouse, lets users resend these files. Resending may not require Adobe involvement. If your FTP account appears to be filling up frequently, contact Adobe Customer Care, which can suggest delivery alternatives that can include increasing the FTP space and file number quota on the account.

For information on FTP limits and data retention, see *FTP Limits and Data Retention*.

Ad Hoc Analysis Delivered Reports

You can set up a delivery schedule to automatically send reports to an email address or to an FTP server.

The delivery schedule can occur for a selected period. The reports are generally sent on the first day of the following period, but are not sent any later than the morning of the second day. You can modify or stop these scheduled deliveries at any time. For more information on **Ad Hoc Analysis** delivered reports, see the *Ad Hoc Analysis Help*.

For information on FTP limits and data retention, see *FTP Limits and Data Retention*.

Data Warehouse Delivered Reports

Data warehouse lets you request reports that display advanced data relationships from raw data based on your unique questions.

FTP delivery, in this case, is available as a part of the **Advanced Delivery Options** setup. By using FTP, you need an existing internal FTP account or an Adobe FTP account. Adobe does not automatically set up the FTP account for you through the data warehouse interface. FTP delivery should be immediate, depending on the file size and the number of reports being processed.

For information on FTP limits and data retention, see *FTP Limits and Data Retention*.

Report Builder Delivered Reports

Use Adobe report builder add-in for Microsoft Excel to build customized requests from Web analytics data, which you can insert into your Excel worksheets.

Requests can dynamically reference cells within your worksheet, and you can update and customize how the data is presented. For FTP, you must ensure that the host is available externally. For more information on the **report builder** delivered reports, see *Report Builder Help*.

For information on FTP limits and data retention, see *FTP Limits and Data Retention*.

Engineering Services Engagements with FTP

Many Adobe Engineering Services engagements involve the exchange of data, which frequently requires FTP.

These engagements include **DB VISTA** and custom projects.

For information on FTP limits and data retention, see *FTP Limits and Data Retention*.

DB VISTA

Similar to a SAINT upload via FTP, **DB VISTA** receives data through an FTP upload. For more information on file formats and the **DB VISTA** upload process, refer to the **DB VISTA** Introduction to **DB VISTA** white paper, which can be found in the Adobe Suite Help site by going to **Supporting Docs** > **White Papers**.

Custom Engagements

Adobe Engineering Services offers custom projects that use both FTP and sFTP. See Adobe Engineering Services for more information on custom projects. For information on sFTP, see *Secure File Transfer Protocol*.

FTP Limits and Data Retention

All Adobe FTP accounts have a data storage limit of 2 GB (or 63 files). Files are retained on these FTP accounts for 90 days.

Deleting FTP Data and FTP Accounts

The Adobe FTP policy automatically disables access to FTP accounts that remain idle for 90 consecutive days.

Adobe then removes disabled FTP accounts (and permanently removes all data stored in those accounts) after an additional 90-day grace period. For example, an FTP account which remains idle for 90 days (from July 5, 2012 to October 2, 2012) is disabled on October 3, 2012. It is then entirely removed on January 2, 2013.

No accounts are disabled prior to October 5, 2012 and no accounts are removed prior to January 2, 2013.

Adobe also permanently removes old data in active accounts if that data has not been accessed for 90 days.

These policies remain in effect for all FTP accounts moving forward from the July 5, 2012 date.

To assist us in this process, and to ensure the enhanced FTP environment continues to provide secure and reliable data transfer for our customers, we ask our customers to do the following:

- Remove outgoing data from the FTP system after that data has been successfully transferred to your in-house environment. Adobe identifies and removes any files left on the system after 90 days.
- Notify Adobe when FTP accounts are no longer needed so they can be deactivated and removed.

Restoring Deleted FTP Data and FTP Accounts

Any data that has been deleted from an FTP account cannot be restored by Adobe.

If an FTP account that you had been intending to use has been disabled, contact your Adobe Account Manager, who can discuss additional options with you.

Upgrading Adobe FTP Servers

Upgrades to Adobe FTP servers can introduce new configurations that affect automation scripts (often used to download or upload data regularly), which are often built to rely on certain server settings.

For example, a new success status is introduced, affecting a script that uses the success status to trigger a certain action. Adobe pro-actively notifies users of such configuration changes. If Adobe notifies you that an FTP server upgrade is imminent, check your automation scripts to make sure they are still working correctly.

Using Passive FTP Mode

Active FTP vs. passive FTP controls how the port connections are established, and the choice has some firewall implications.

Adobe uses passive FTP, which is a more secure form of data transfer, where the flow of data is set up and initiated by the File Transfer Program (FTP) client rather than by the FTP server program. If you are having difficulty connecting to Adobe FTP, make sure you are using passive mode.

FTP Processing Times

Processing time for any FTP file, whether for classifications or Data Sources, is based on the number of files already in the processing queue and the size of your file.

If the file you submit is larger than 5MB, you may experience slightly longer import times. If you do not see your completed file in your FTP site after 1-2 days, but you do not see the uploaded data reflected in reporting tools, your organization's supported users should contact Adobe Customer Care to determine whether there was an issue with the file.

Be sure to add the notification recipient's email address when you create your FTP file. That way most issues result in a notification being sent to the recipient.

Secure File Transfer Protocol

sFTP is a secure protocol for transferring data that ensures that nobody can see your data but you. Adobe Engineering Services can set up an sFTP account to securely retain your data.

Push Delivery

This means that Adobe's servers "push" the file to your servers. Essentially, we deliver it to your end point.

Data Warehouse is the only Adobe Analytics tool that can push data via sFTP.

The following Analytics tools **cannot** push data via sFTP:

- Data Feeds
- Reports & Analytics reports
- Ad Hoc Analysis reports
- Report Builder reports

Pull Delivery

This means that the file is sent to one of Adobe's servers using normal FTP. If you want the file on your server, you have to pull it off Adobe's server using sFTP from your server to Adobe's FTP server. You can do this using one of three methods:

- *Connect to Adobe via sFTP without a password.*
- *Connect to an Adobe FTP Account with sFTP.*
- You can push any reports you want to Adobe's FTP-like data feeds/R&A/Ad Hoc, and so on and then Pull them off. Adobe cannot deliver these reports to the sFTP server you have set up.

Connecting to an Adobe FTP Account with sFTP

Instructions to set up secure transfer with Adobe FTP servers.

1. Request an Adobe hosted FTP account (50 MB quota).
2. Create Public/Private RSA keys. In Linux, run:

   ```
   ssh-keygen -t rsa
   ```

   If you are in a Windows environment, use puttyGen to create the keys.

3. Create a file named `authorized_keys` (no extension).
4. Copy the contents of the Public key into `authorized_keys`.
5. Upload `authorized_keys` to an FTP account:

   - Connect to the Adobe FTP account.
   - Create a `.ssh` directory (if it does not already exist).
   - Upload the `authorized_keys` file to the `.ssh` directory.

6. Test the connection by logging in to the FTP account using sftp.

For more detailed information, see *Connect to Adobe via sFTP Without a Password*.

Sending Adobe Data to an External FTP Account with sFTP

The Adobe Engineering Services group can set up a custom project to redirect your data to an external FTP account using sFTP.

The value is that your data is sent to you securely without having to retrieve the data from an Adobe FTP site. To determine the scope of the project, contact your Adobe Account Manager.

Sending Data Warehouse Requests to sFTP Servers

Adobe supports the export of DataWarehouse requests to sFTP servers.

Ensure that the following tasks are completed:

Adobe supports the export of data warehouse requests to SFTP servers, provided the following are met:

- `sftp://` protocol is specified in the host field (for example, `sftp://ftp.example.com`) and ONLY port 22 is used when requesting a Data Warehouse report.
- Adobe's `authorized_keys` file is in the `.ssh` directory within the root directory of the user you log in with
- The destination is not to `ftp.omniture.com`. SFTP protocol between Adobe's internal servers is not supported.
- The destination supports one-factor (PKI) authentication. If there is a two-factor challenge, delivery of the report will fail. Make sure your server is not configured to attempt two-factor authentication. Adobe Analytics requires that only the key and nothing else is used to log in.
- Adobe supports SSHv2 encryption, and falls back to SSHv1 (RSA key only).

To successfully send a Data Warehouse request via sFTP:

1. Obtain the `authorized_keys` file by having one of your organization's supported users contact Customer Care.
2. After this file is obtained, log in to the FTP site under the same credentials that are used for the Data Warehouse request.
3. In the root directory, navigate to the folder named `.ssh` (if one does not exist, create one) and place the `authorized_keys` file there.
4. Go to the Data Warehouse request manager. Configure the request as desired, then click **Advanced Delivery Options**.
5. In the pop-up window, click **FTP**, then specify the ftp site (including the `sftp://` protocol, such as `sftp://ftp.omniture.com`) via port 22.

   Including the `sftp://` protocol is only permitted when using sFTP. Regular FTP requests should omit the protocol prefix (such as, `ftp.omniture.com` instead of `ftp://ftp.omniture.com`).

6. Enter the name of the folder you want to place the file in the Folder field. A folder is required.
7. Enter the same username and password used in Step 2.
8. Click **Send**.

The sftp PUT command places a temporary file with an extension of .part in the specified directory. When the upload completes the file extension is renamed to the final extension, at which point it is ready for your use.

Connect to Adobe via sFTP Without a Password

Connecting without a password to FTP accounts is only possible using both an sFTP connection and an alternative authentication method. This involves a set of two files (one to reside on the FTP account and the other to reside on your computer) called a public and private key combination.

This is not any less secure than password authentication. It is another form of authenticating that does not require the user to type in a password each time. When used correctly, these files let that particular computer log in without having to specify a password. This needs to be set up on a computer-by-computer basis. All other connections that don't use these key files still need to specify a password.

An sFTP (Secure File Transfer Protocol) is required by some clients for transmitting sensitive data. An sFTP connection is more secure than a regular FTP connection because it allows encrypted data communication. By default, all Adobe FTP accounts are

sFTP ready. An sFTP connection can be opened with a valid username and password by using an sFTP client that connects on port 22 (normal FTP connections that are non-secure use port 21).

When using sFTP, it is possible, under specific conditions, to use private keys to connect to the account without a password. This method lets your computer use key files for authentication instead of usual password authentication. This means that only the computer that holds the private key may connect without a password. All other computers/users still need to use password authentication (unless private keys have been set up on these other computers as well).

To set up and use private keys for password-less authentication

1. FTP account created (Adobe).

   An Adobe representative can create an FTP account, if one does not already exist. Contact your Adobe Account Manager or Adobe Customer Care to get an account created.

2. Public/Private key creation (Customer).

   Create a public and private key combination. The private key is a file that is private to your computer/server and resides there. The public key file needs to be uploaded to the Adobe account. When used in this manner you can connect without password authentication. The public key file at Adobe matches to the private key file on your computer/server and authenticates in that manner.

   To create these files, engage your internal network support group to create a key set that is proper for your environment. There are many tools and applications that can be used to create these two files.

   An example of how this can be done in a UNIX shell environment is shown below. This is just one example of how this can be done and serves as a helpful point of reference for communicating requirements to your team or internal network group.

   ```
   // Linux/Unix (bash shell)

   // First make sure the ".ssh" directory exists

   $ mkdir ~/.ssh

   $ cd ~/.ssh

   // Now actually generate the key pair

   // Usually we will want to create an empty passphrase (just hit "Enter" for both password
   prompts)

   $ ssh-keygen -q -t dsa

   Enter file in which to save the key (/home/user/.ssh/id_dsa):

   Enter passphrase (empty for no passphrase): ...

   Enter same passphrase again: ...

   // Rename or copy the public key file to "authorized_keys"

   // This "authorized_keys" file is the one that we will upload to the Adobe FTP server in
   step 3

   $ cp id_dsa.pub authorized_keys
   ```

3. Upload Public key to FTP account (Customer).

   Upload and test the public key. Connect to the Adobe FTP account and create a `.ssh` directory, if it does not already exist. Upload the `authorized_keys` file to this `.ssh` directory. This can be done many different ways (command line, graphical FTP client, and so forth). All that is required is the ability to create a directory and upload a file.

Here, again, is an example of doing this using a UNIX shell.

```
$ ftp ftp.Adobe.com

OR (depending on hostname provided by Adobe)

$ ftp ftp2.Adobe.com

// Enter username and password for account as prompted

ftp> mkdir .ssh

ftp> cd .ssh

ftp> put authorized_keys

ftp> exit

// Now test the connection by logging in to the server using "sftp" command:

$ sftp username@ftp.omniture.com

OR (depending on hostname provided by Adobe)

$ sftp username@ftp2.omniture.com

// You should immediately receive an sftp prompt without having to enter the password:

sftp>
```

Contact and Legal Information

Information to help you contact Adobe and to understand the legal issues concerning your use of this product and documentation.

Help & Technical Support

The Adobe Marketing Cloud Customer Care team is here to assist you and provides a number of mechanisms by which they can be engaged:

- *Check the Marketing Cloud help pages for advice, tips, and FAQs*
- *Ask us a quick question on Twitter @AdobeMktgCare*
- *Log an incident in our customer portal*
- *Contact the Customer Care team directly*
- *Check availability and status of Marketing Cloud Solutions*

Service, Capability & Billing

Dependent on your solution configuration, some options described in this documentation might not be available to you. As each account is unique, please refer to your contract for pricing, due dates, terms, and conditions. If you would like to add to or otherwise change your service level, or if you have questions regarding your current service, please contact your Account Manager.

Feedback

We welcome any suggestions or feedback regarding this solution. Enhancement ideas and suggestions for the Analytics suite *can be added to our Customer Idea Exchange*.

Legal