

EDGAR[®]

Public Dissemination Service – New Subscriber Document

Table of Contents

1.0 PDS System Overview	2
1.1 PDS Points of Contact	5
1.2 New Subscriber Setup Requirements	5
1.3 FASTCopy Information and Installation Procedures	6
1.4 General Configuration Information (All Platforms)	6
2.0 Becoming a PDS Subscriber	7
2.1 Initial Subscription Package	7
2.2 Implementation Schedule	8
2.3 Operational Procedures	8
2.4 Access Procedures for PDS Files	9
2.5 Subscriber Information and FAQ	10

List of Tables and Figures

Figure 1: The PDS Site Network Configuration	4
Table 1: PDS Contact Information	5
Table 2: PDS Frequently Asked Questions	11



1.1 PDS SYSTEM OVERVIEW

The United States Securities and Exchange Commission (SEC) has designed the Electronic Data Gathering, Analysis, and Retrieval (EDGAR) System to support the assembly, transmission, validation, acceptance, and dissemination of public documents as filed by public companies, management firms, and individuals pursuant to SEC securities regulations. Once received and accepted by EDGAR, public submissions are immediately disseminated to all interested parties (Subscribers) external to the SEC EDGAR network. A remote EDGAR Public Dissemination Service (PDS) receives a direct feed from the EDGAR Host and initiates the real-time dissemination to Subscribers. All PDS Subscribers are managed through this remote site.

This document provides configuration, testing, maintenance, and billing information to potential and existing Subscribers of the EDGAR dissemination feed. For the most current version of this document, please refer to <http://www.sec.gov/info/edgar/ednews/dissemin.htm>.

Throughout this document, the Subscriber equipment and applications are referred to as the client, Subscriber interface, or Dissemination Receipt Server (DRS). The primary PDS site, hardware, and applications are referred to as PDS. The primary PDS and the alternate PDS Server are both hosted by RackSpace. In addition, the EDGAR primary and secondary (backup) hardware and operations are referred to as EDGAR and EDGAR Disaster Recovery (DR), respectively.

ATTAIN LLC is the primary contractor in support of the development of the SEC's EDGAR System. The original PDS system was developed in 1992 and on July 1, 2014, Attain LLC assumed full responsibility for support of the EDGAR PDS System.

EDGAR accepts and disseminates 2000-4,000 live public submissions per day during non-peak periods and 4,000-12,000 live submissions per day during peak periods¹. During these "high-activity" periods, EDGAR may receive up to 250-500 MB of live, public data in one hour or up to 5+ GB of data in a single business day. Disseminated submissions may be as small as 1 KB or as large as 200 MB, depending on their purpose, and contain only public documents². The average submission size is around 500 KB. Submissions, which are composed of a header and concatenated documents, are disseminated in ASCII text (no binary is disseminated without being Uuencoded first). Concatenated documents can have ASCII/SGML, HTML, XML, XBRL, or Uuencoded PDF, JPG, or GIF formats.

¹ There are several peak submission periods throughout the calendar year, including the following:

- Four 10-Q peaks (40-45 days after the 1st – 4th calendar quarter: May, August, November, and February, respectively, with each quarterly peak having an accelerated filing period 30-35 days after the quarter end)
- One 10-K/24F-2NT peak (late March, usually consisting of very large 10-K submissions, with an associated accelerated filing period from mid-March)
- Two N-SAR peaks (late February and late August)
- One SC 13G William's Act peak (mid-February, usually the highest volume of submissions, but they are very small)
- Four Ownership peaks (Two business days following the end of each calendar quarter)
- One N-PX peak (at the end of August)

See the SEC Public Website, www.sec.gov, for more information on peak submission periods.

² Private documents that are part of filer submissions are not disseminated with the original submission (*.dissem file). They are stored internally at the SEC for a period of time, and then upon SEC discretion, some are released as a separate dissemination file (*.pr file).



ASCII/SGML documents are no wider than 80 characters per line, except in specifically designated sections of document text, identified as tables (<TABLE>), where a 132-character width limit is supported. HTML, XML, and XBRL document text has no inherent width limits. Uuencoded document text is 64 characters wide.

After receiving a submission via the internet or SSH (Secure Shell), EDGAR assigns an Accession number (ex: 000035001-05-00100) to the submission, then parses it to extract key information from the header and document. This information is then loaded into the EDGAR database and subsequently run through a rigorous series of syntactic and semantic validation rules before being accepted by EDGAR. After acceptance, the submission is then reassembled with informative header tags and the original public documents before being disseminated to the PDS and the SEC internet site. The acceptance and dissemination process usually takes no longer than two (2) minutes from the receipt of filing submissions to EDGAR.

EDGAR transmits the dissemination stream to the PDS server and PDS disseminates EDGAR files to the Subscribers. Publicly disseminated submissions reside at the PDS FTP site. Subscribers can download filings directly from the PDS servers either per file or in a zip file for the entire day's package.

From 6:00 a.m. to 10:00 p.m. Eastern Standard Time (EST), the PDS site receives EDGAR public dissemination transmissions via the internet. (The primary PDS server is located at the Rackspace data center facilities in Herndon, Virginia. The PDS Helpdesk will coordinate with the Subscriber and Rackspace to establish connectivity to the PDS servers).

Upon receipt, the PDS server disseminates copies of the submission to each of the Subscriber outboxes where the submission is compressed before being forwarded through a firewall to the Internet Protocol (IP) address of each Subscriber's DRS site – see the overview on the next page.

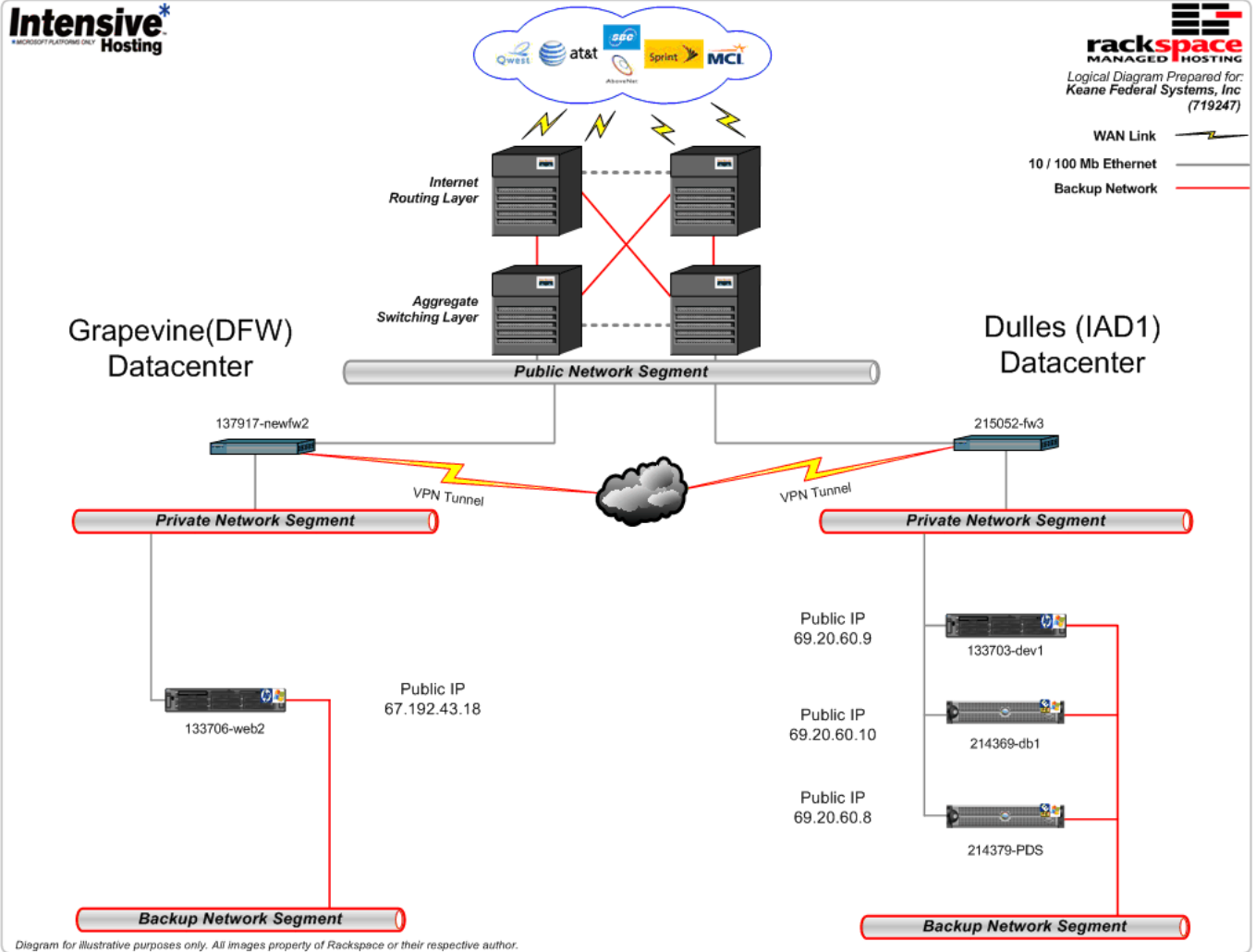


Figure 1: The PDS Site Network Configuration

1.1 PDS Points of Contact

Contact	Type	Email	Phone
Chris Mumm	Business	christina.mumm@attain.com	703.822.5894
PDS Help Desk*	Technical	PDSHelpDesk@attain.com	1.877.537.4737
SEC - Office of Investor Education & Advocacy	EDGAR (PDS content)	oiea@sec.gov	202.551.6551
Filer Technical Support	EDGAR (Filing content)		202.551.8900
SEC Contact Information	Various SEC Divisions and organizations	http://www.sec.gov/info/edgar/edgarcontact.htm and http://www.sec.gov/contact.shtml	See website pages

*Normal PDS Help Desk Hours are from 6:00 AM EST – 10:00 PM EST, on SEC business days.

Table 1: PDS Contact Information

1.2 New Subscriber Setup Requirements

Technical questions will be forwarded to the appropriate personnel after initial PDS subscription interest and verification has been established.

Subscribers planning to receive data over an existing internet connection must have a static public IP address or a valid hostname (DNS Resolution is required) assigned for the DRS and it must be configured to allow data to flow into that address over port 5745. The ability to Ping is also preferred to allow for more comprehensive monitoring and troubleshooting.

The DRS should be able to receive and process a minimum of 100 MB of EDGAR public submission data per hour. (NOTE: There may be hours during peak periods when over 250-500 MB of public submission data will need to be processed).

A secure router/firewall at the Subscriber's site to service the DRS is also recommended.

Operational support of the DRS is available from 6:00 a.m. - 10:00 p.m. (M-F); optional testing support may be requested after 10:00 p.m. (M-F) and on weekends.

In order to support simultaneous, encrypted dissemination of submissions, immediate verification, and authentication to a variety of Subscribers, the PDS uses the Commercial Off-the-Shelf (COTS) product, **FASTCopy**, from **RepliWeb, Inc.** (a Division of Attunity Ltd.) www.attunity.com. **FASTCopy** uses a proprietary protocol based on Transmission Control Protocol (TCP) that supports compression and authentication during transfer. **FASTCopy** also employs a variety of security enhancing functions that limit the use of remote server commands. Only **FASTCopy** dissemination commands will be supported from the PDS sites to ensure the security of the PDS and the disseminated data.

See the **RepliWeb, Inc.** website, <http://www.attunity.com/products/attunity-mft/resources>, for a list of the supported platforms and operating systems that may receive a dissemination feed.

See the **RepliWeb, Inc.** web page, <http://www.attunity.com/products/attunity-mft/resources>, for a description of **FASTCopy**. Before the official licensed version of the **FASTCopy** software is delivered to the Subscriber from the PDS Helpdesk, the Subscriber may download a trial version for testing purposes.



In addition to a User ID and Password the PDS Helpdesk will provide one (1) **FASTCopy** license to each Subscriber with a basic PDS subscription.

1.3 FASTCopy Information and Installation Procedures

Important information for **FASTCopy** will be supplied directly to Subscribers. The PDS Helpdesk will provide the link to the **FASTCopy** software from **RepliWeb, Inc.**, and provide documentation and license(s) to the Subscriber. Related information for **FASTCopy** can be found at the **RepliWeb, Inc.** website, <http://www.attunity.com/products/attunity-mft/resources>. The PDS Helpdesk will make additional information concerning updates to the PDS and/or **FASTCopy** available via email.

FASTCopy installation, configuration, and administration information can be found on Repliweb's website, <http://www.attunity.com/products/attunity-mft/resources>. The Subscriber is responsible for maintaining the latest **FASTCopy** documentation. **If the PDS subscription is terminated, the Subscriber is required to remove all Repliweb FASTCopy software/or licenses associated with the ATTAIN LLC Federal EDGAR PDS from their systems and provide a statement to ATTAIN LLC Federal advising the removal is completed.**

The entire **FASTCopy** package must be installed and configured correctly in order for the **FASTCopy** Daemon, fcopyd, to operate properly. Please refer to the **FASTCopy** documentation for installation and maintenance instructions for each OS. This includes an Installation Guide, Administrator's Guide, User's Guide, Reference Guide, and a Developer's Guide.

1.4 General Configuration Information (All Platforms)

For the most up to date information and for specific configuration information for your system, please consult <http://www.attunity.com/products/attunity-mft-rmft>.

2.0 BECOMING A PDS SUBSCRIBER

All interested parties wishing to subscribe to the EDGAR Public Dissemination Service (PDS) should contact the ATTAIN LLC Business Contact identified in Section 1. The Subscriber must formally respond to ATTAIN LLC (via e-mail, fax, or letter) with **complete** answers to the following questions. Due to the sensitive nature of this information, all correspondence received by potential Subscribers will be handled confidentially.

- What is the OS and version loaded and maintained on the DRS?
- When is the Subscriber available to test the dissemination feed from the PDS? Outside normal hours after 10:00p.m. on weekdays or on weekends? Does the Subscriber have a redundant DRS that can be used for testing?
- Who are the Subscriber's POC for all technical configuration issues? (Please include their name, e-mail address, and telephone number.)

After receiving acceptable responses to these questions from the potential Subscriber via e-mail, fax, or mail, and after confirming the interest directly by contacting the Subscriber's POC, the PDS Helpdesk will order a specific version of **FASTCopy** and license/maintenance agreement for the Subscriber.

The Subscriber is responsible for the expenses of acquiring and operating their DRS. These expenses cover hardware, software, and connectivity charges. These expenses are in addition to the mandatory annual subscription fee paid by the Subscriber to ATTAIN LLC.

The SEC and ATTAIN LLC reserve the right, at any time, to disable a connection should operational considerations warrant this action. Sensitive information, such as DRS and router IP addresses, User IDs, passwords, and software licenses, which are necessary to interact with the PDS, should be utilized and maintained with absolute discretion by the Subscriber.

The delivery of the Initial Subscription package will constitute the beginning of the Subscriber Implementation period, which may last up to one (1) month (for installation, configuration setup, and thorough testing) or as little as (1) day before the Subscriber will be ready to receive the live PDS feed. During this time, the Subscriber should have sufficient time to become familiar with **FASTCopy** and test/troubleshoot all necessary connections and downloading options.

2.1 Initial Subscription Package

The Initial Subscription package consists of the following:

- **FASTCopy** download link and an activation key for the **FASTCopy** Daemon configuration
- Link to the **FASTCopy** installation and administration documentation
- **FASTCopy** license
- PDS Subscriber Technical Specification (any updates will be e-mailed to the Subscriber's POC)
- PDS support e-mail addresses & phone numbers

After receiving the Initial Subscription package, the Subscriber should contact the PDS Business Contact to verify the receipt of the package and initiate their implementation schedule.

2.2 Implementation Schedule

Once the PDS Helpdesk has all the necessary technical information and the Subscriber has successfully installed FastCopy, as well as completed the procurement and installation of any connectivity necessary for dissemination, the PDS Helpdesk, working with the Subscriber, will schedule a period to test connectivity to the Subscriber DRS. These tests will occur at a time convenient for both the PDS Helpdesk and the Subscriber.

The test will include validating a successful connection can be made using Telnet from our Primary and Alternate server to port 5745, then sending a small text file to the DRS to ensure proper operation of FastCopy. Once connection is established, the feed can be turned on at a time convenient for the Subscriber.

Each subscription includes a block of non-billable support hours allocated to installation, configuration, and technical support. The Subscriber agreement details the number of hours that are allocated to non-billable support. Once the block of support hours is exhausted, additional support will be provided on a time and materials basis at the rate specified in the Subscriber agreement.

2.3 Operational Procedures

Of primary concern to the SEC and ATTAIN LLC is the maintenance and support of the Subscriber DRS. Once live, the Subscriber DRS must be operational with minimal down time from 6:00 a.m. to 10:00 p.m. EST, Monday-Friday, except for SEC Holidays³. The Subscriber must have operational support on-hand during this time and the Subscriber must forward any information regarding POC changes to the PDS Helpdesk, as soon as possible.

Subscribers will need to enable procedures for daily startup, active monitoring of the PDS feed, submission processing and cleanup, nightly shutdown, and troubleshooting scenarios. Subscribers should configure their DRS appropriately, especially noting the performance and storage space necessary to support EDGAR peak submission periods.

FASTCopy will attempt to transmit (and retransmit) each submission. If the Subscribers DRS develops receipt problems, the PDS operator on duty will redirect the specific Subscriber's feed to a staging area to prevent impacting the other Subscribers. Each submission is transmitted independently and **FASTCopy** logs the results accordingly. Each Subscriber transmission is automatically logged into a database and monitored for failures. Noting queue (unfinished jobs) buildup is a primary mechanism through which the PDS Helpdesk monitors all of the Subscriber dissemination feeds. If a Subscriber's site is determined to be non-operational (without prior announcement of a planned outage or known problem from the Subscriber), this technique will quickly alert the PDS Helpdesk of the issue and they will promptly notify the Subscriber there is a problem with the Subscriber receiving the PDS feed. The PDS Helpdesk will then work with the Subscriber to troubleshoot the problem and identify corrective action or a work-around. When the issue is resolved, the PDS Helpdesk will communicate with the Subscriber to ensure the feed is working correctly.

In any networked communication system a variety of problems can interrupt the flow of data. PDS Subscribers should actively monitor the status of their CSU/DSU, router(s), firewall(s), and DRS. Once configured properly, the **FASTCopy** Daemon should operate consistently. However, the Daemon (and its logs, if available) should be checked regularly for CPU utilization and activity.

³ See the SEC website, <http://www.sec.gov/info/edgar/fedholiday.htm> for a list of the scheduled Federal Holidays in the current year.



Once a problem has been identified and communicated, the PDS Helpdesk and the Subscriber will determine if the severity of the problem warrants further action. If the outage is temporary and has been resolved, the PDS Helpdesk will then re-establish the feed and, upon confirmation filings are being delivered successfully, deliver all filings held in the staging area. If the downtime extends longer than the current business day, the PDS Helpdesk will create a subset zip file for the appropriate period and arrange with the Subscriber a method of delivery that can include posting it on the PDS FTP site for the Subscriber to easily download, or simply dropping it into their regular feed.

Although no specific End-Of-Day (EOD) message is transferred to Subscribers at 10:00 p.m. EST, an Audit file, named `dissem2_MM-DD-YYYY.EOD`, is the last disseminated transmission for the business day. The Audit file contains a list of all submissions (*.dissem, *.paper, *.pr and *.pc) as disseminated from EDGAR between 6:00 a.m. and 10:00 p.m. that day. The presence of this file will signal to each Subscriber the EDGAR business day is completed.

2.4 Access Procedures for PDS Files

If the Subscriber cannot receive real-time submission for whatever reason, or if a Subscriber wishes to retrieve a specific submission or set of submissions previously disseminated in the past 2 (two) days, then the Subscriber can access the PDS FTP Server for their public dissemination information. At the Subscriber's request, the PDS Helpdesk will provide access to the FTP Server allowing the download of PDS files. To access the archive site, each Subscriber must use a username and password provided by the PDS Helpdesk.

2.5 Subscriber Information and FAQ

The following are common questions raised by Subscribers and their respective answers, regarding the PDS:

Question	Answer
Can I have more than one connection at the PDS site?	Only one Primary Feed will be supplied per subscription. However, a Subscriber may want a Secondary Feed or additional Subscriptions for Primary and Secondary connections. The PDS Subscriber Agreement contains the rate schedule for PDS connections.
Will there be Beginning of Business (BOB) control identifier from the PDS at 6:00 a.m. each business day?	Currently, there is no plan for one. The Subscriber should ensure the FASTCopy Daemon is operational (listening to the incoming port) from 6:00 a.m. to 10:15 p.m. EST (M-F). Troubleshooting processes will begin if the Subscriber server is unavailable prior to BOB.
Will there be Close of Business (COB) control identifier from the PDS at 10:00 p.m. each business day?	The last transmission for each business day will be the Audit file, named <code>dissem2_MM-DD-YYYY.EOD</code> , which contains a listing of all disseminated submissions from EDGAR for that day. This file is distributed between 10:01 p.m. EST and 10:15 p.m. EST, depending on pending submission processing activity within EDGAR. At a minimum, the Subscriber should keep the FASTCopy Daemon operational (listening to the incoming port) from 6:00 a.m. to 10:15 p.m. EST (M-F)
How can my DRS receive submissions that were not disseminated to it due to a temporary service outage?	The PDS Helpdesk team works with all Subscribers to ensure they receive all disseminated data. If you have had an outage, the Helpdesk will know and already be working to ensure all missing files are set aside until your outage has been restored. If the outage is temporary and has been resolved, the PDS Helpdesk will then re-establish the feed and, upon confirmation filings are being delivered successfully, deliver all filings held in the staging area. If the downtime extends longer than the current business day, the PDS Helpdesk will create a subset zip file for the appropriate period and arrange with the Subscriber a method of delivery that can include posting it on the PDS FTP site for the Subscriber to easily download, or simply dropping it in their daily feed.
What if FASTCopy doesn't support my platform/OS?	Repliweb may be able to compile a version of FASTCopy for Subscribers with specific DRS configurations. If not, ATTAIN LLC may not be able to directly support you as a Subscriber.
Is the FASTCopy Daemon multi-threaded?	Yes, many transmissions may be in progress at once to a Subscriber's server. Depending on the size of the transmission or the "noise" associated with that particular transmission, the order of the submissions received by the Subscriber may not necessarily be the order of the submissions initiated from the PDS. FASTCopy verifies the success of each transmission before completing the transmission.
How do I keep track of the sequence of submissions each day?	EDGAR does not assign a sequence number to the disseminated submission. It is the Subscriber's responsibility to track and record each submission received from EDGAR. The FASTCopy Daemon has a logging feature that can be invoked to trace a day's activities. Also, the Audit file transmitted at the end of each business day contains a list of all disseminated submissions for the day.
Can two PACs for the same Accession Number be disseminated by the SEC in a single day?	Yes, however, PAC filenames also include the exact hour, minute, and second they are created, significantly reducing the probability a duplicate PAC can be generated.
All PDS FTP Server issues...Who do I contact?	Contact the PDS Helpdesk if you cannot access the site.

Question	Answer
What if the Subscriber needs to update their DRS to a different platform? How is FASTCopy upgraded?	The Subscriber needs to inform the PDS Helpdesk of their intended platform change. The PDS Helpdesk will then provide the appropriate license from Repliweb and distribute it to the Subscriber. The platform upgrade will have to be carefully tested, as if this were a new Subscriber being added to the PDS configuration.
Can a Subscriber use their FASTCopy license to support an onsite DRS configuration?	Yes, Subscribers may install FASTCopy on a separate DRS for testing purposes, using the same license, as long as it is not used for convenience, load balancing, or for another application.
Does the daily Audit file contain a list of submissions disseminated to my DRS site or to all sites?	The daily Audit file, disseminated around 10:00 p.m. each business day, contains a listing of all *.dissem, *.paper, *.pr and *.pc submissions sent from EDGAR to the PDS site.
If I don't get an Audit file at the end of the day, how can I obtain one?	Check the status of your equipment and contact the PDS Helpdesk. They may be able to retransmit the Audit file. The Audit file may also be retrieved from the PDS FTP site.
Can I request an Audit file during the business day?	No, the Audit file is the last transmission disseminated to Subscribers from the PDS each business day.

Table 2: PDS Frequently Asked Questions