



Professional SERVICES

CyberControls, LLC™
PROFESSIONAL SERVICES

SBC Audit Feasibility Analysis Report

For: Premiere Network Services Inc.

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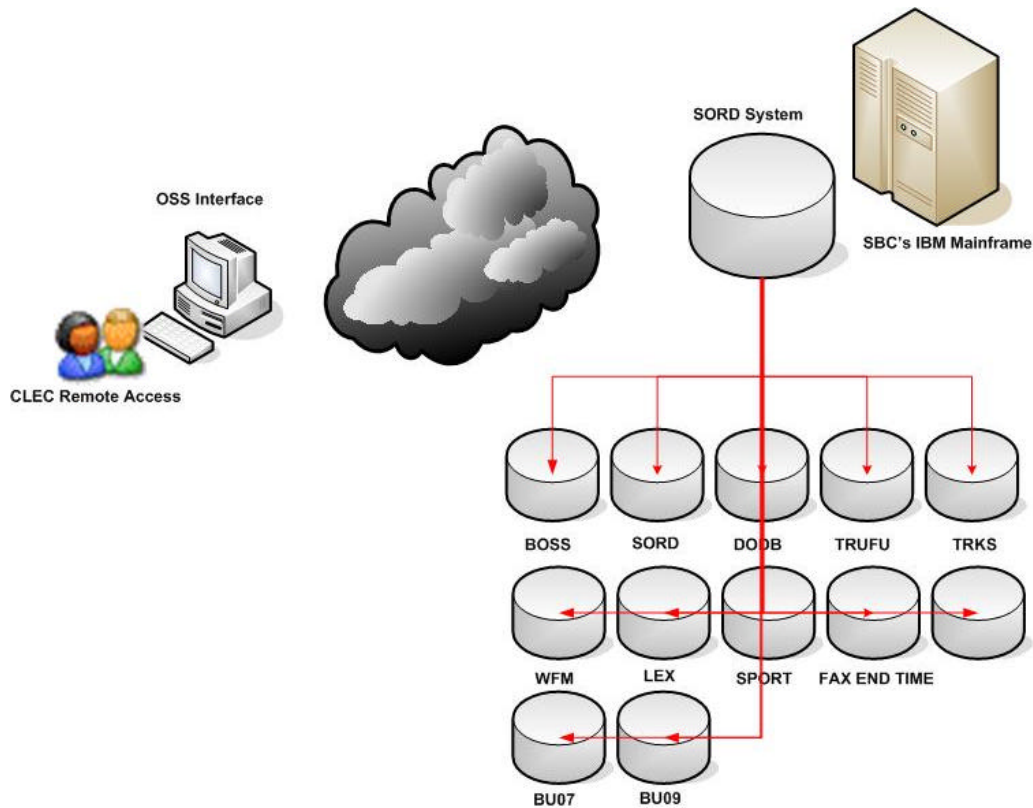
Providing Data Auditing and Analysis
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EXECUTIVE SUMMARY

This feasibility report was proffered as a first step to essentially ascertain whether the claims being waged against SBC by Premiere Network Services Inc. could be validated through the performance of a subsequent audit of numerous SBC databases in which essential data is purported to reside. The complex nature by which SBC enters customer order related information into their data systems (SORD) has been identified as the source of where the audit will chiefly be focused upon. Not much is known about the structure and nature of these databases that are maintained by SBC as of yet. In fact, this lack of specific knowledge about these targeted databases undermines CyberControls ability to adequately surmise exactly how to go about performing an effective data audit in behalf of Premiere Network Services Inc.



Another goal of the Feasibility Report was to objectively analyze Premiere's past efforts to reconcile the numerous irregularities it noticed in a steady stream of order records that were processed and submitted by Premiere in behalf of Premiere's customers and the performance measure shortfalls being issued to Premiere. CyberControls' extensive analysis and data

interrogation of the 11,683 orders provided to SBC in February, 2004 resulted in a resounding conclusion and validation that SBC's explanation for numerous irregularities is highly questionable given that their statements often contradict the obvious results of a straightforward examination of the facts and figures. One of the more perplexing order entry processes of SBC's is the unexplainable use of inserting their "SS" code onto Premiere customer account orders which absolves Premiere's control of the account and passes the control over to SBC for "administrative purposes". In the analysis conducted by CyberControls on this particular area of the dispute, just over 46% of the orders were redirected to SBC by inserting an "SS" code to Premiere's submitted customer orders. Since these excluded orders from Premiere's performance measure calculations, it is safe to say that the only party who favorably benefited from this continual practice was SBC.

CyberControls' ability to perform an audit in behalf of Premiere Network Services Inc. as a next step is completely contingent upon the cooperation of SBC to provide information and access to its databases. The close proximity to SBC's regional headquarters in Hoffman Estates, IL would provide our audit team with convenient access to SBC's data, which would keep costs down and would speed up the audit process. In the last section of this report, CyberControls has listed the essential data sources as we understand things to be that will be critical in performing the necessary audit and examination of SBC's data and workflow processes to reach an objective conclusion as to what has actually taken place within SBC as it relates to Premiere's claims.

Once CyberControls receives the information it requires about the logistics of accessing the required data to perform the audit, a detailed budgetary estimate can be developed for both parties to review. In the absence of this required information, it will not be possible to create such an estimate.

PRE-AUDIT RECONCILIATION VALIDATION

To help gain a comprehensive understanding of the SBC order data and its structure, we conducted an in-depth analysis of the order records and the process conducted by Premiere to collect, convert, and query these records to report its findings.

Data Collection

As part of its CLEC agreement with SBC, Premiere is permitted, through a secure website, to access orders placed by Premiere, view their current status, as well as save the individual records as text files. This data can be viewed for up to 2 years prior to the current date.

Using the web interface, the user has several options to choose from to find order data. Once a query has been submitted, the resulting data is first shown in summary format, allowing the user to see in summary those records that were found. The user then has the ability to drill into these summary records to see the detail for each individual order.

The user is limited in the format the data can be saved. For the ease of data conversion, Premiere chose a standard text file format. Within this format, each column of data for the order is saved as a different row in the file. Each row contains the column label as well as the data that is stored within that column.

The following procedures were implemented by Premiere to ensure that data was collected from the website effectively:

- Each order was saved as its own distinct file.
- Each file was named using the convention "<order number>.txt". SBC has an apparent limit to the size of the order number which may cause the same order number to be used for separate and distinct orders. If an order was saved more than once, each subsequent order was saved using the convention "<order number><a, b, c, etc...>.txt".¹
- Each order was saved in full and the resulting text file was not altered as part of the data interrogation phases.
- Each order contains a transaction number that includes within it the ID of the user who saved the order and the date and time.
- After the order is saved, the user would open the order using a simple text editor. At the bottom of the file, the user would copy in the summary data shown on the initial web page. These additional steps ensured that the data was successfully saved in the correct format (visual verification) and added an additional check that the correct order was saved by comparing the summary order record number to the detail record number.

By using these methods, a potential exists that unintentional human error may have caused some records to have been accidentally altered or saved incorrectly. Further, these procedures were constantly reviewed and modified throughout the process to ensure data was effectively

¹ Approximately 700 order records have been saved that have the same order number. While some of these orders may be distinct, the possibility exists that the same order may have been saved twice. If the same order was saved twice, the possibility exists that the data may have changed between the dates the order was saved. For example, the order status may have been updated from Completed to Posted. Without an in depth analysis of each record, it is difficult to determine and remove duplicate orders from the analysis.

collected. These changes in procedures did affect the data saved to the file as the additional summary data was not added until later. However, in our opinion, the method and procedures used by Premiere to collect data from SBC are sound and effective. After reviewing a subset of the original source data, it is apparent that any procedural changes or human error had little or no effect on the quality and accuracy of the order data.

It is understood that the data being presented on the website to the CLEC's is summary data from SBC's system. While this method of data collection is the only way Premiere is able to gain access to the SBC data, an assumption is made that the dataset Premiere is using to conduct its analysis has been accurately reported by SBC. In order to validate this assumption, a request was sent to SBC to produce the order data from their underlying systems. This request has not yet been fulfilled as of this writing.

Data Culling and Conversion

The data that is saved from the SBC website is stored in a text file with each row representing a column of data. In order to effectively analyze this data, an effort was taken to convert the data from a text file format to a relational database format.

Each order text file is broken into several different sections. The first section, or header section, contains summary information about the order, such as the SBC order number, CLEC number, customer code, order date, due date, status, as well as other fields. The second section, or detail section, contains the detail information for the order, such as installation location, engineering requirements, contact information, general order remarks, as well as other information. The final section, or trailer, contains a distinct transaction number for this order.

Using the help of several ex-SBC employees, Premiere was able to decipher the data format stored in the text file and converted it into database format. In order to facilitate this data conversion, several text manipulation programs were written by Premiere. The following is a brief description of the steps performed on each order:

- Each order was copied to a new file in a separate sub-directory.
- Irrelevant HTML information stored at the beginning of the file is removed. This information is not important to the order and appears to be consistent across all the saved orders.
- The order is read into a memory buffer. A column of data has the potential of being stored on multiple lines within the file. If this situation is found, the lines are consolidated into a single line for analysis.
- The rows are saved into a database table. Each row contains the source order file, the order number, the distinct row this line was found in the order, the section where the data resides (header, detail, trailer), the column (FID) label, and the value of the data.
- Logging occurs within the conversion program. If a record is not successfully converted, the log will display the order and column for which the error occurred.
- Lookup tables have been created to aid the user in understand the codes used by SBC.

Once the data has been converted, it resides in a format that can easily be queried and analyzed.

Two different approaches were taken to validate this process. First, a conversion routine was written to mimic the performance of the text conversion program. This program was written entirely from scratch using a different programming environment. A separate comparison

program was also created to compare the results of the validation program to the original text conversion program.

While the resulting database structure was different between the two tables, the data conversion results were by and large exactly the same. In some instances, the original program was referenced in order to resolve very rare cases in which data differences were due to unique situations on a particular order, but in no way was the original program used to provide bulk sections of code to complete the conversion. This validation process was run on many randomly selected orders and produced similar results.

The second method used to validate the data conversion process was to spot check randomly selected orders against the data stored within the database. Once an order was selected, a query was run to select all the rows in the database. Each row was then compared to the original record and the data was verified for accuracy and completeness. Many orders were selected and compared, and in each situation, the results were accurate.

No documentation was provided to describe the data structure provided by SBC. As Premiere had to rely on ex-SBC employees to read and translate the codes for analysis, a potential exists that the translation might be inaccurate in certain areas. It is our conclusion however, that the methods used by Premiere to conduct this data conversion process appear to be sound and technically accurate.

Data Interrogation

Once a standardized database was created containing all the records Premiere was able to download from the website, Premiere was in a position to interrogate the data across all of the orders. After years of investigation, Premiere identified several key areas where inconsistency existed that are the basis for this pre-reconciliation audit.

In an attempt to validate the statements laid forth with the pre-reconciliation audit, we selected several of Premieres' claims and attempted to recreate the results. We used the database provided to SBC in February, 2004 as our baseline to perform our queries. By our calculations, this database contains 11,683 orders.

SBC "Web Site" Reporting Data is Redacted

Within this section of the reconciliation report, Premiere claims that the web site data is the basis for liquidated damages computations. However, SBC does not included orders containing a "SS" code denoting that the order was taken control of by SBC for administrative purposes. In this section, Premiere claims "no less than 6,321 of 9,714 Premiere orders were illegally excluded".

In an effort to validate this claim, the following steps were taken:

- Any order that contained a "SS" code was copied to a temporary table.
- A distinct count of the records stored in this temporary table was taken and the results analyzed.

As part of this analysis, the following items were discovered:

- That 5,413 distinct order contained at least one "SS" code.
- Of those 5,413 distinct orders, 3,932 orders only contained the "SS" code
- Of the remaining 1,481:
 - 7 records contained a "SS" code and a "CE" code.

- 850 records contained a “SS” code and a “CS” code.
- 18 records contained a “SS” code and an “ED” code.
- 6 records contained a “SS” code and an “EX” code.
- 600 records contained a “SS” code and a “LX” code.

While the record set used in CyberControls’ validation analysis was slightly larger than the record count quoted by Premiere, we were able to identify a smaller subset of matching records. Even though this set was smaller, it still recognizes that the “SS” code was used on a significant number of orders (46%). A logical conclusion can be asserted that if the “SS” code is used only for administrative purposes, then the proportion of over 46% appears to be extraordinarily high and represents a significant number of orders that may have been excluded from the performance measure calculations being provided by SBC.

Due date Reconciliation

Each order contains a due date that is to occur within 3 – 5 business days of the original order date, unless otherwise agreed upon with the CLEC. During discussions with ex-SBC employees, Premiere learned that the “ZD” code is used to change the due date of the order.

Premiere states that “9.4% of its orders had the due date changed or pushed out, or 914 orders”. To confirm this statement, the following actions were taken:

- Queries were run against the database to find distinct orders that contain a “ZD” code.
- The resulting records were exported into a temporary table and analyzed.

Based on these steps, the following results were discovered:

- Of the 11,683 distinct orders within the database, 1,096 distinct orders were found to have the “ZD” code in it. This represents 9.4% of all the orders.
- The “ZD” code was found to be used 2,350 times. This increased number represents the “ZD” code being used multiple times on the same order.

These results appear to be consistent with the claims made by Premiere.

ITRAK Records

As part of the May 2003 reconciliation, Premiere provided to SBC a random sampling of orders that have been “ITRAK’ed”. ITRAK’ing is designed to be a rare administrative proceeding between SBC and a CLEC to allow SBC additional time to respond to a CLEC’s order due to rare and unusual circumstances.

While we did not receive a copy of the 300 orders that were randomly sampled, a query was run against the database to retrieve all records that have been ITRAKed. Of the 11,683 orders in the database, 1,558 were found to have an ITRAK code on it, representing 13% of all orders. Of these 1,558 records, 625 were found to only contain an “SS” code, which equates to 40% of the ITRAK records. This percentage appears to be very high for a process that is only to be used in rare and unusual circumstances. Further, it is interesting that the 625 orders placed by Premiere do not contain the additional Service Measurement code describing how Premiere originally placed the order. This may denote a problem with the data integrity checks implemented by SBC or manipulation of the underlying data.

Premiere PM 5 Orders Assigned to Other CLEC's

On March 19, 2004, SBC provided a reconciliation report to Premiere. Detailed in this report was a list of Premiere orders that SBC shows as "Found in PM 5 detail file for another AECN". As part of their analysis, Premiere performed a simple percentage calculation where these Premiere order numbers were being carried as those of another CLEC.

As part of this chart of data, SBC does not explain whether the number of Premiere records found in the detail files is inclusive or exclusive of those records found in the detail file for another AECN. After further review of the records listed, it is our assumption that the record counts are mutually exclusive. We base this on the counts listed for "PM 5 manual detail file 10/2002". These counts show that 2 records were found for Premiere, and 4 records found for another AECN. This situation can only occur if the counts are exclusive of each other. This assumption was not used as part of Premiere's percentage calculation.

Further, by re-calculating the percentage based on Premiere's assumption, several minor mathematical errors were discovered. The chart below details these findings:

# of Orders	Description of Disposition	Premiere Reported Percentage	Premiere Calculated Percentage	CC Calculated Percentage
106	Found in PM 5 detail file 01/2002			
3	Found in PM 5 detail file 01/2002 for another AECN	2.8%	2.8%	2.8%
53	Found in PM 5 detail file 01/2003			
15	Found in PM 5 detail file 01/2003 for another AECN	28.3%	28.3%	22.1%
63	Found in PM 5 detail file 02/2002			
8	Found in PM 5 detail file 02/2002 for another AECN	10.1%	12.7%	11.3%
81	Found in PM 5 detail file 02/2003			
6	Found in PM 5 detail file 02/2003 for another AECN	7.4%	7.4%	6.9%
214	Found in PM 5 detail file 03/2001			
12	Found in PM 5 detail file 03/2001 for another AECN	5.6%	5.6%	5.3%
139	Found in PM 5 detail file 03/2002			
8	Found in PM 5 detail file 03/2002 for another AECN	5.7%	5.8%	5.4%
75	Found in PM 5 detail file 03/2003			
26	Found in PM 5 detail file 03/2003 for another AECN	34.6%	34.7%	25.7%
222	Found in PM 5 detail file 04/2001			
17	Found in PM 5 detail file 04/2001 for another AECN	7.6%	7.7%	7.1%
45	Found in PM 5 detail file 04/2002			
142	Found in PM 5 detail file 05/2001			
8	Found in PM 5 detail file 05/2001 for another AECN	5.6%	5.6%	5.3%
74	Found in PM 5 detail file 05/2002			
161	Found in PM 5 detail file 06/2001			
6	Found in PM 5 detail file 06/2001 for another AECN	3.7%	3.7%	3.6%
63	Found in PM 5 detail file 06/2002			
4	Found in PM 5 detail file 06/2002 for another AECN	6.3%	6.3%	6.0%
131	Found in PM 5 detail file 07/2001			
13	Found in PM 5 detail file 07/2001 for another AECN	9.9%	9.9%	9.0%

78	Found in PM 5 detail file 07/2002			
4	Found in PM 5 detail file 07/2002 for another AECN	5.1%	5.1%	4.9%
213	Found in PM 5 detail file 08/2001			
4	Found in PM 5 detail file 08/2001 for another AECN	1.8%	1.9%	1.8%
352	Found in PM 5 detail file 08/2002			
10	Found in PM 5 detail file 08/2002 for another AECN	2.8%	2.8%	2.8%
176	Found in PM 5 detail file 09/2001			
2	Found in PM 5 detail file 09/2001 for another AECN	1.1%	1.1%	1.1%
224	Found in PM 5 detail file 09/2002			
8	Found in PM 5 detail file 09/2002 for another AECN	3.6%	3.6%	3.4%
112	Found in PM 5 detail file 10/2001			
6	Found in PM 5 detail file 10/2001 for another AECN	5.4%	5.4%	5.1%
92	Found in PM 5 detail file 10/2002			
4	Found in PM 5 detail file 10/2002 for another AECN	6.5%	4.3%	4.2%
58	Found in PM 5 detail file 11/2001			
4	Found in PM 5 detail file 11/2001 for another AECN	1.1%	6.9%	6.5%
35	Found in PM 5 detail file 11/2002			
3	Found in PM 5 detail file 11/2002 for another AECN	1.8%	8.6%	7.9%
152	Found in PM 5 detail file 12/2001			
46	Found in PM 5 detail file 12/2002			
8	Found in PM 5 detail file 12/2002 for another AECN	4.0%	17.4%	14.8%
6	Found in PM 5 manual detail file 01/2002			
1	Found in PM 5 manual detail file 01/2003 for another AECN	16.7%	16.7%	14.3%
10	Found in PM 5 manual detail file 02/2002			
1	Found in PM 5 manual detail file 02/2002 for another AECN	10.0%	10.0%	9.1%
20	Found in PM 5 manual detail file 02/2003			
2	Found in PM 5 manual detail file 03/2002 for another AECN	10.0%	10.0%	9.1%
2	Found in PM 5 manual detail file 04/2001			
5	Found in PM 5 manual detail file 04/2002			
1	Found in PM 5 manual detail file 04/2002 for another AECN	14.3%	20.0%	16.7%
5	Found in PM 5 manual detail file 05/2002			
5	Found in PM 5 manual detail file 06/2001			
2	Found in PM 5 manual detail file 06/2002			
1	Found in PM 5 manual detail file 07/2001			
4	Found in PM 5 manual detail file 07/2002			
2	Found in PM 5 manual detail file 08/2001			
2	Found in PM 5 manual detail file 08/2002			
2	Found in PM 5 manual detail file 09/2002 for another AECN	9.5%	100.0%	100.0%
2	Found in PM 5 manual detail file 10/2001			
2	Found in PM 5 manual detail file 10/2002			

4	Found in PM 5 manual detail file 10/2002 for another AECN	50.0%	200.0%	66.7%
1	Found in PM 5 manual detail file 12/2001			
4	Found in PM 5 manual detail file 12/2002			
3	Found in PM 5 manual detail file 12/2002 for another AECN	62.5%	75%	42.9%
	Average of Percentages	11.51%	21.36%	14.54%

By comparing the Premiere percentages listed to the Premiere percentages re-calculated, it is immediately noted that the re-calculated percentages are, at times, significantly higher than those reported as part of this reconciliation. Further, it can be noted that because the CyberControls percentage is using a larger denominator for its calculation, the CyberControls percent is slightly less than that reported by Premiere.

Lastly, Premiere states that the average of all orders assigned for other AECNs is 23.02% and arrived at that number by averaging the calculated percentages for each month. As shown in the last line of the table, CyberControls cannot attest to Premiere's claim. By re-calculating Premiere's reported percentage, the average is only 11.51%, which is significantly less than stated. By recalculating the percentages and averaging those, the average comes closer at 21.36%. Lastly, by using the modified average approach implemented by CyberControls, the calculated average of percentages is only 14.54%, or 37% less than what is claimed in the pre-audit report.

This average of percentages approach also contains a significant flaw. By trying to average percentages that do not use the same subset of records, the results can be significantly skewed. For example, consider the following sample subsets of data:

	Numerator	Denominator	Calc Perc
Subset 1	3	100	3.0%
Subset 2	1	10	10.0%

By averaging the 2 percentages, the average is calculated at 6.5%. However, this is misleading due to the different sizes of the sample sets. The real percentage should be calculated by adding the two subsets of data together, or 3.6% (4/110).

With this understanding, CyberControls recalculated the percentage of PM 5 orders that were assigned to other CLECs. Based on the published results, 193 orders were found in the PM detail files for other AECNs out of 3,373 orders in total that were found in the PM detail files. This shows that only 5.7% of the PM 5 detail records were found for other AECNs.

While this percentage is significantly less than what was published in the pre-audit report, it still raises significant concerns about the data integrity controls put into place. SBC should explain in detail how an order can ever be reassigned to another CLEC.

ESSENTIAL DATA REQUIRED TO PERFORM AUDIT

In order to complete the audit, CyberControls will need access to the following types of essential data:

From SBC:

- Premiere's order records from SBC source data systems (electronic and paper based).
- Carrier Access Billing records (CABS) from SBC source data systems for the time period in question.
- Change order request forms (including all versions applicable to Premiere customers)
- Copies of monthly invoices sent to Premiere that detail installation charges, monthly usage charges, and recurring component costs.
- Payment detail for any payments made to Premiere for liquidated damages. The detail must include the individual orders for which damages are paid, the amount paid for each order, the date and check number the payment was made on.
- Service Order forms/ time sheets and firm order confirmations (FOC) and ITRAK forms created as part of completing an order.
- Any status reports that may have been created as part of completing an order.

From Premiere:

- Any original information or documentation as it relates to orders placed with SBC.
- Any records of payment made by SBC relating to liquidated damages. These records should include any detail received that identifies why the liquidated damages was paid.

Order Processing Infrastructure

To fully understand how an order flows through SBC systems, CyberControls requests the following information from SBC:

- A detailed description of the steps and processes performed by the user inputting the order into the system from start to finish. This description should include the process the user goes through to modify and update existing orders (i.e., extending due dates) and how supporting order documentation is captured and stored.
- A detailed description of how order data is stored on SBC's systems. This description should include:
 - A list of all databases that may contain data related to the orders. This list should include all databases that are related to the SORD system, including but not limited to:

SORD	Service Order Retrieval Database
BOSS	Business Order Support System
WFM	Work Flow Management system
LEX	Laser GUI
SPORT	Service Posted Order Retrieval

ITRAK Override System	Used to manipulate ITRAK values
FAX END TIME	Used to manipulate the FOC time
TRFU	Database for notes
DODB	Discarded Order Database
BU07	Cleanup file
BU09	Referenced in Orders

- A data dictionary providing detailed descriptions of the table structure for order records stored within each database. Column names, data types, field lengths and field descriptions should be included in this document.
- A detailed description of each distinct code used by SBC with the database. A code is defined as a distinct abbreviation implemented by SBC to denote a larger value with the data. For example, the code "TX" is used to abbreviate the State "Texas".
- A detailed work flow process that describes how data moves between databases as well as a description of the event that causes data to be replicated.
- A detailed description on how data presented through the website interface used by the CLEC's is generated. The original source for this data should be included in this document.
- A detailed description of data integrity checks that have been put into place to ensure that data cannot be modified or altered without appropriate checks and balances.
- An SBC OSS subject matter expert (SME) shall be made available to CyberControls to assist in:
 - Answering any questions about the order data or work flow process.
 - Facilitating timely response to requests made by CyberControls throughout the audit.
 - Gathering un-altered and un-limited source data for orders from any and all databases for detailed analysis and review.
- A proposal from SBC as to what options are available to CyberControls to perform its audit in Hoffman Estates, IL by having direct access to the data sources listed above should also be requested.