
IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF UTAH, CENTRAL DIVISION

FATPIPE NETWORKS INDIA LIMITED,
n/k/a FATPIPE NETWORKS, LTD.,
an India corporation,

Plaintiff,

vs.

XROADS NETWORKS, INC., a Delaware
corporation,

Defendant.

**ORDER FOR APPOINTMENT
OF COURT'S EXPERT**

Case No. 2:09-cv-186-DN

District Judge David Nuffer

The court intends to appoint an expert to examine technical issues presented in FatPipe's Motion for Sanctions for Ticket Database Spoliation and Discovery Violation.¹ This motion was filed by FatPipe, and seeks sanctions against XRoads for alleged noncompliance with discovery orders issued by the court. Appointment of an expert under Fed. R. Evid. 706 is necessary to evaluate technical issues involved in the sanctions motion. These issues, while secondary to the substantive issues that will decide this case, have been made significant by the sanctions motion.

As stated hereafter, applications from persons interested in this appointment are due by noon Mountain Time March 29, 2013 and shall be submitted by email to dj.nuffer@utd.uscourts.gov.

1. Selection of an Expert

The court will appoint an expert with the following qualifications.

- Professional Background in Database Management and Forensics
- Specific Knowledge of MySQL Database File Structure
- General Knowledge of SQL Commands
- Experience Working with Linux Operating System
- Specific Knowledge of Linux File System Privileges

¹ Docket no. 447, filed March 7, 2012.

- Experience Working with Various Scripting Languages
- Specific Knowledge of How Scripting Languages Might Interact with Databases
- General Knowledge of Backing Up and Restoring MySQL Databases
- General Knowledge of Computer Hardware with Regards to Linux OS
- Previous Experience with Linux OS and MySQL Databases
- Previous Experience with Omnistar Live software is preferred

Acceptance of the appointment shall constitute acceptance of the terms of this order and submission to the jurisdiction of the court. Applications shall outline relevant qualifications and prior relevant experience, and propose compensation terms, as well as any prior relationship with any of the parties. Apart from contact necessary during the solicitation process to determine whether an expert has the necessary qualifications to perform the work in question, the expert shall not have contact with either of the parties prior to being appointed. The court would prefer fixed fee proposals which may be divided into Phase I and Phase II. Out of pocket expenses (such as travel) will be limited to expenses actually incurred.

The court and parties may solicit applications. Applications are due by noon Mountain Time March 29, 2013 and shall be submitted by email to dj.nuffer@utd.uscourts.gov. The court will relay all applications to the parties before accepting any application.

2. Standards of Conduct

Parties are expressly permitted to have ex parte contact with the expert. This is due to the need for scheduling communications, technical communications, acquisition of factual background, and (in the case of the examination of XRoads's on-site database) the presence of proprietary competitive information outside the scope of the current motion for sanctions and not relevant in this case. The expert will summarize each ex parte contact and communication, including date, time, duration, substance of discussion and participants, and shall include a copy of any email or other documentary record of the communication. Summaries shall be filed with the reports contemplated in this order. The expert may not engage in work for these parties outside the Outlined Tasks.

All communication between the expert and the judge will be in writing supplied to all parties, or at a hearing. The expert will have no ex parte contact with the judge.

3. Payment to Expert

The expert shall receive reasonable compensation at a rate to be set by the court. The expert's fees and expenses shall be borne by the parties in equal shares as billed by the expert, and the expert's fees may be taxed as a cost by the court. The court may order a deposit of funds by each party from which the fees for the expert will be paid. At the conclusion of each phase of work, the expert shall submit complete billing for the Outlined Tasks to that point and the court will order payment.

4. Factual Background for Expert

This litigation involves claims that XRoads's products infringe patents owned by FatPipe. In the course of discovery, the court ordered that XRoads's customer ticket and response

database in which customer issues with XRoads's products are identified be made available to FatPipe (under significant protections) to enable identification of issues in performance of the XRoads's products which might be relevant to the issues in the case. The order stated:

XRoads shall deliver a native format copy of the customer ticket database to FatPipe subject to Confidential - Attorney's Eyes Only designation under the Stipulated Protective Order. In addition, XRoads shall deliver the name and version of the software used to maintain this database, and the contact information of the manufacturer.

XRoads controls and maintains an email-based customer support ticket system. Copies of at least some customer support tickets and copies of at least some responses to tickets are stored at XRoads in a database using Omnistar Live 6.0 software. The database includes at least a tickets table and a responses table. The tickets table has 35 fields. The responses table has 12 fields. Among the ticket fields are a date, a ticket_id, and two attachment fields. Every response to a ticket includes that ticket's ticket_id, and every response includes a response date. Responses include their own two attachment fields (different from the two ticket attachment fields). The database is in SQL format. XRoads states the database is used in the management of the business of XRoads, which includes most records of the business operations of the company. The database was created in January 2007 and is in continuous use. In January of 2012 XRoads produced a CD to Fatpipe which contained the following files:

- commands.txt 1KB (which contained the mysqldump commands used to generate the dump files)
- responses_dump 88,265KB (which contained the dump information that could be obtained via the mysqldump command)
- ticket_dump 43,931KB (which contained the dump information that could be obtained via the mysqldump command)
- responses.zip 59,786KB (which contained the substance of the entire response database in native format, via the responses.frm, responses.MYD, and responses.MYI files previously referenced by XRoads)
- tickets.zip 30,882KB (which contained the substance of the entire ticket database in native format, via the tickets.frm, tickets.MYD, and tickets.MYI files previously referenced by XRoads)

The entire customer support data file (the tickets and responses) is actually a combination of files, including the

- responses.frm 9KB,
- responses.MYD 86,168KB, and
- responses.MYI 555KB,

as well as the

- tickets.frm 15KB,
- tickets.MYD 42,905KB, and
- tickets.MYI 374KB files (uncompressed).

A portion of that database relating to customer inquiries and responses was extracted using mysqldump and delivered in discovery to FatPipe. The total size of the dump files is 132,196KB or 132MB. Within the MySQL files produced within the responses.zip and tickets.zip files are approximately 5000 ticket records (spanning from 2007 through 2012) where at least several hundred contain attachments; the combined size of those files is 130,026KB or 130MB. A directory of those files has been included above.

XRoads claims the attachment data is contained within the respective .MYD files within the tickets.zip and responses.zip files.

The files produced within the .zip files thus include the following:

- .frm -is used to describe how the data is formatted
- .MYD - contains the actual data (i.e. all of the ticket or response records and the attachments are included within these files)
- .MYI - an index of the data for easier searches, etc.

FatPipe claims the data delivered to it by XRoads is partially unusable and is still incomplete. FatPipe claims, among other things, that:

- XRoads has not produced native format data;
- FatPipe has no access to the software needed to access the data delivered, including the binary attachment data delivered;
- Tickets and Responses are missing, indicating that tickets have been deleted, including:
 - Ticket numbers (assigned by the system as tickets are created) are missing; and
 - Tickets and responses from the months September 2011 through January 2012 are missing;
- XRoads did not produce a database, but merely extracted two tables from a database;
- The production was incomplete by omitting fields integral to the ticket and response functions;
- Tickets and their responses cannot be read together as a conversation, and cannot be sorted as they would be in the ordinary course of business; and
- Attachments are not readable.

XRoads claims it has delivered data in a format that is reasonably accessible by someone of reasonable skill and that FatPipe's lack of proficiency in examining the data is the problem. XRoads acknowledges that the data delivered is a subset of data from XRoads's overall information management system but claims the data delivered represents all the customer ticket and response data.

The relevant data which the expert must examine is in two locations: The original data is in the possession of XRoads and full contact information is:

Daren French
XRoads Networks

7700 Irvine Center Drive, Suite 800
Irvine CA 92618
949-477-6100, ext. 753
dfrench@xroadsnetworks.com

The produced, extracted data is in the possession of FatPipe's counsel and full contact information is:

Barbara Polich
Antczak Polich Law LLC
324 south 400 West, suite 225
Salt Lake City, UT 84101
(801)521-4409
bpolich@antczaklaw.com

The project will first examine the data in FatPipe's possession and then the data in XRoads's possession.

5. Outlined Tasks

The expert's work will be performed in two phases. At the end of each phase, the expert will prepare a written report for the court and counsel. The written reports will be considered by the court with other information already provided on this motion, and are not conclusive of issues. The expert will be available for a hearing at the end of each phase at which the court and counsel may ask questions. This hearing may occur by video conference. The court will determine at the conclusion of Phase I whether and when Phase II will proceed.

The Outlined Tasks may be amended only by an amended order.

a. Phase I – Data in FatPipe's Possession

The report of activities under Phase I shall be delivered within 60 days of appointment.

At the time the expert is appointed, XRoads shall provide to the expert a copy of the files produced by it to FatPipe. The expert shall, however, make the analysis below by examination of the files in FatPipe's possession.

Phase I will examine the XRoads's data files in FatPipe's possession at the address specified above.

i. Nature of XRoads Customer Support Ticket and Response Data at FatPipe

A. Are the files in FatPipe's possession identical to the files delivered to the expert by XRoads?

- B. Are the .frm, .myd, .myi files in the possession of FatPipe reasonably useable to replicate the same information available to XRoads in its customer support ticket and response functions, such as displaying image attachments, determining which responses correspond to a given ticket, determining which ticket corresponds to a given response, determining which attachment(s) go with a given ticket or response, determining which ticket or response goes with a given attachment, performing keyword searches of tickets and responses, determining which ticket_ids are missing, locating all tickets for a specified customer or other specified field value(s), locating all tickets for a specified date or a specified range of dates, and sorting the tickets and responses by one or more chosen fields such as the date, ticket_id, appliance version, firmware version, or type of attachment (if any)? If not, what additional information or software would be necessary or what alternative format should be produced?
- C. Is a configuration file essential or helpful for FatPipe to use the .frm, .myd, .myi files or otherwise essential to access and use the data produced to FatPipe?
- D. Is Omnistar Live 6.0 software available for purchase? Is that software necessary for access to the customer support ticket and response information in the possession of FatPipe? Please explain any limitations on the functions described in subparagraph B above which would be enabled for FatPipe if Omnistar Live 6.0 software were available to it? Please state the current market price of Omnistar Live 6.0 software, if known.
- E. Is it reasonably necessary for FatPipe to know the hardware and software XRoads uses in the normal course of business to access the customer support ticket and response information? Please explain.
- F. Are the .frm, .myd, .myi files in the possession of FatPipe reasonably understood as “native format?” Please explain.
- G. Explain the relation of the ticket table and response table to the XRoads customer support ticket and response functions.

ii. Attachments

- A. Are the attachments which are present in the XRoads customer support ticket and response database accessible to FatPipe? If not, what is necessary to make them accessible to FatPipe? How many attachments are there? If it is possible to determine the nature of each attachment, how many are:
 - Firmware
 - Network diagrams
 - Screen shots

Other (please specify)

- B. For information, FatPipe has identified the following tickets in the ticket_dump file as referring to an image attachment: 1069, 1173, 1220, 1263, 1512, 1682, 1835, 1843, 1845, 1916, 1917, 1935, 2166, 2167, 2260, 2401, 2459, 2614, 3184, 3305, 3584, 3746, 3968, 4418, 4834, 4959, 5341, 5467, 5731, 5858, 5933, 5956, 6288, 6334, 6459, 6500, 6522, 6525, 6538, 6697, 6698, 6708, 6742, 6793, 6922, 6999, 7059, 7062, 7077, 7085, 7213, 7223, 7341, 7408, 7413, 7500, 7586, 7639, 7642, 7650, 7671, 7756, 8023, 8338, 8604, 8636, 8671, 8746, 9116, 9493, 9718, 9744, 9923, 9929, 10296, 10405, 10481, 10557, 10629, 10761, 10782, 10791, 10805, 10839.
- C. For information, FatPipe has also identified the following tickets as having responses in the responses_dump file that refer to an image attachment: 1087, 1176, 1179, 1219, 1282, 1284, 1457, 1529, 1547, 1552, 1556, 1568, 1656, 1703, 1844, 1869, 1899, 1964, 1971, 1982, 1997, 2031, 2032, 2033, 2082, 2098, 2137, 2162, 2167, 2212, 2229, 2261, 2323, 2412, 2724, 3029, 3085, 3184, 3192, 3203, 3213, 3252, 3294, 3308, 3370, 3516, 3646, 3727, 3912, 4292, 4558, 5065, 5190, 5252, 5341, 5377, 5522, 5778, 5810, 5783, 5787, 5836, 5903, 5993, 5996, 5998, 6202, 6274, 6334, 6364, 6465, 6522, 6556, 6697, 6755, 6761, 6798, 6825, 6885, 6887, 7029, 7038, 7055, 7078, 7097, 7147, 7150, 7196, 7220, 7223, 7232, 7233, 7255, 7279, 7323, 7365, 7375, 7403, 7413, 7440, 7466, 7515, 7521, 7532, 7578, 7642, 7652, 7661, 7678, 7752, 7753, 7804, 7807, 7821, 7836, 7842, 7890, 7921, 7922, 7938, 7978, 7986, 8337, 8340, 8605, 8671, 8802, 8868, 9194, 9674, 9721, 9792, 9958, 10049, 10361, 10363, 10454, 10500, 10535, 10616, 10629, 10661, 10668, 10675, 10680, 10691, 10693, 10757, 10782, 10791, 10839.

iii. Missing Data

Are customer support tickets and responses from the months September 2011 through January 2012 inclusive present in the material in FatPipe's possession?

iv. Nature of Processing by XRoads

- A. XRoads used MySQL software to provide the customer support ticket and response data to FatPipe. Is this a reasonable method for delivery of that data? Please explain.
- B. XRoads indicates it used the command "mysqldump -p omnistar tickets > ticket_dump" and the command "mysqldump -p omnistar responses > responses_dump". Is this a reasonable method for delivery of that data? How does use of these two commands differ from using the single command "mysqldump -p omnistar > native_database_copy"? Please explain.

b. Phase II XRoads's Omnistar system

Phase II will begin after Phase I is completed and the court notifies the expert to proceed. The report of activities under Phase II shall be delivered within 60 days after the court gives notice to proceed with Phase II.

Phase II will examine the Omnistar database at XRoads's premises at the address given above.

i. Questions unanswered in Phase I.

The Phase II report shall address questions not fully answered in Phase I and may revise responses given in Phase I.

ii. Nature of Customer Support Ticket and Response Data at XRoads

- A. Describe the general functions provided by the Omnistar software as implemented in the XRoads business.
- B. What is the full name and version number of the Omnistar software in use at XRoads?
- C. Is the XRoads customer support ticket and response data maintained in an integrated database with other XRoads management information?
- D. What data fields are accessed in any screens or reports produced by the XRoads management information system in the customer support ticket and response functions?
- E. Are email and ticket password fields mandatory in the customer support ticket and response functions of XRoads system?
- F. Does examination of the files in the possession of FatPipe reveal that all those data fields accessed in any screens or reports produced by the XRoads management information system in the customer support ticket and response functions were actually provided by XRoads to FatPipe? If not, what fields, files or information were not provided?
- G. Do database logs constitute part of the XRoads customer support ticket and response dataset? Are they essential for FatPipe to access the data produced to it?
- H. Are the attachments in the possession of FatPipe in the same format maintained by XRoads?
- I. How are attachments to tickets and responses accessed in the XRoads system?

- J. If the attachments are not reasonably accessible to FatPipe, but accessible to XRoads, what is the reason for that difference? What would be required to provide the attachments in reasonably accessible format?
- K. Are the database tables in the possession of FatPipe the same tables as the database tables maintained by XRoads?

iii. Missing Data

- A. XRoads customer support ticket and response system assigns a Ticket ID automatically. FatPipe asserts that the following Ticket ID numbers are missing.

7003, 7006-7008, 7010, 7011, 7013-7016, 7018, 7024-7028, 7037, 7043, 7044, 7116 7129, 7370, 7458, 7485, 7490, 7493, 7519, 7560, 7562, 7579, 7580, 7584, 7589-7594, 7597-7599, 7603-7609, 7630, 7631, 7665, 7666, 7705, 7713, 7715, 7719, 9133, 9157, 9240, 9250, 9486, 9717, 9724, 9848, 10008, 10009, 10068, 10253, 10277, 10364, 10389, 10502, 10503, 10523, 10556, 10561, 10563, 10572, 10576, 10579, 10582, 10590, 10593-10596, 10605, 10609, 10613, 10614, 10641, 10651, 10653, 10660.

Is this listing correct and complete? Please explain.

- B. XRoads claims that missing ticket ID numbers in the customer support ticket and response database are caused by spam or deletion of duplicates. FatPipe asserts that the materials produced still contain spam (such as tickets 8306, 9105, 9799, 10005, 10631, 10705) and duplicates (tickets 1534 and 1535, 1699 and 1700, 2485 and 2486, 7351 and 7352, 7401 and 7402, 10836 and 10837). FatPipe claims that the only certain way to know whether deleted tickets actually were spam or duplicates is to restore and inspect the missing tickets. After first hand examination of the XRoads customer support ticket and response database, does either party's explanation make sense and why? Is there a feasible way of restoring the tickets corresponding to missing sequential numbers? Is there any audit trail or other way to substantiate when, how or why these tickets were deleted? Please explain.

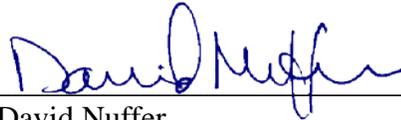
6. Other Terms

- a. The parties will cooperate with the expert, promptly respond to inquiries, provide access to premises, equipment and information as requested, and facilitate the expert's work.
- b. The expert is a judicial officer and immune from suit for work within the scope of the appointment.

- c. The expert shall maintain confidentiality of the information in the XRoads's customer ticket and response database (whether contained in the files produced to FatPipe or in XRoads's possession) and shall not reveal the same to anyone other than the attorneys of record in this case, and to the court, and as otherwise ordered by the court.
- d. Failure to comply with this order may result in sanctions from the court.

Dated March 6, 2013.

BY THE COURT:

A handwritten signature in blue ink, appearing to read "David Nuffer", is written over a horizontal line.

David Nuffer
United States District Judge