



## CASE STUDY



Northern California telephone and Internet service provider deploys Solera Networks deep packet capture and stream-to-storage appliance, becomes CALEA compliant, improves network security and performance and saves about \$100,000.

### Cal-Ore Snapshot

Northern California Telephone and Internet Service Provider

Industry: Telecommunication

Location: United States

Solutions: Two Solera DS 1000 Appliances

Results: Met requirements to be CALEA compliant

Saved more than \$175,000 over a TTP option

Improved network security

Provide full historical record for IDS

*"With the Solera Networks solution, I can go back to look at the traffic to see exactly what happened."*

**Charles Boening**  
Network Manager  
Cal-Ore Communications Inc.

### Overview

CALEA (Communications Assistance for Law Enforcement Act) is a federal law that requires ISPs and telecommunication carriers to ensure their equipment, facilities and services are able to comply with warrants from law enforcement agencies for authorized lawful intercept (wire tap) requests. Failure to comply can culminate in the carrier receiving a \$10,000 per-day fine.

Cal-Ore, a rural telephone company and ISP headquartered in Northern California, has been serving customers for more than 55 years. In order to comply with CALEA requirements, Charles Boening, Cal-Ore's network manager considered three choices. First, they could do nothing and hope they never received a lawful intercept warrant request. Second, they could contract with a trusted third-party (TTP) that would perform any tapping services and bring them into compliance: at a six-figure price tag with ongoing fees. Or third, they could purchase a Solera DS 1000 from Solera Networks that not only provided a low-cost and surprisingly straightforward solution to CALEA compliance, but also performed a number of network management functions that brought tremendous value and ROI.

### Challenge

Charles and his team began their exhaustive research to find a solution that worked best for their needs.

"We found a few options, but one of the requirements I had was that I wanted a solution that did something more than just strict CALEA compliance," he said. "Initially, the reaction was to turn to a TTP, but as it turns out, it just didn't make sense with the TTPs. They were asking us to spend in the neighborhood of \$100K for a box that would sit there and wait for a warrant. I wanted something I could use on a day-to-day basis that would improve security and performance of my network."

Not only did the TTPs want to charge up front or on a monthly fee basis, but every time a warrant appeared, they would charge additional fees to fulfill the warrant. Furthermore, The TTP solution only gave them a solution for just one site. With the Solera Networks product, they were able to purchase multiple systems for multiple sites at a fraction of the price the TTPs were asking.



See everything. Know everything.™

“When it came down to it, the biggest bang for our buck was with the Solera Networks solution.”

## Solution

Boening purchased two Solera DS 1000 appliances. They added an additional 400 Gig of storage, which brings their total storage for packet capture to 1.2 terabytes and an additional four-port Ethernet card so they can create multiple capture points for traffic. “We not only capture internet traffic, but also traffic from other points in our network with the extra Ethernet ports,” Charles said.

Charles says he was impressed with the install of the solution. “Once we decided on the Solera Networks box, compliance was relatively simple. All we did was put it in our rack, configure the IP address and told it to start capturing—that’s about it. It was actually a very easy implementation of the product. If we have a valid warrant come in, we can have packets being captured within five minutes.”

While not being used to fulfill a warrant, Charles uses the Solera DS 1000 for complete network packet capture and storage. This has become an integral component to network management at Cal-Ore. For instance, if they come across a network traffic spike, Boening can use the appliance to “go back in time”, watch what happened, and take appropriate action. The appliance captures every single packet, so he doesn’t worry about making decisions on just a sample of data.

Even though going with Solera Networks saved Cal-Ore about \$100,000 for their CALEA compliance solution, that was only part of the value Solera provided.

Charles is able to use the box for VoIP traffic analysis for analyzing call set up and tear down; mirror traffic right off the Solera Networks box into an Intrusion Detection System (IDS) for logging, history, alarming and notifications, and many other applications including spam trapping.

“We’ll hear from other providers telling us that we have a customer who is sending out spam,” said Charles. “Before I disconnect that customer, I need to verify it is a legitimate compliant. I use the Solera Networks box to find specific traffic over a period of time and put it into an analyzer, such as WireShark, to determine whether the system is sending out spam email. If it is, I will then turn off the customer.”

Charles says security is enhanced as well. “With the Solera Networks solution, I can go back to look at the traffic to see exactly what happened. If I suspect network traffic crashed an application, instead of taking the risk of waiting for the problem to occur again, I have a way to go back to look and I can find out for sure what happened and then take measures to stop it from happening again.

“Being able to do more with the solution than just meeting strict CALEA compliance is one of the most valuable reasons we went with Solera Networks,” Charles said.

## Result

Compliance with any regulation can be difficult to deal with, but when it comes to CALEA compliance, Solera Networks helps Cal-Ore comply and achieve a positive ROI.

“One of the most important points with CALEA is we get the bad guys. With a TTP solution, there is little or no buffer; they just send it out to Law Enforcement,” Charles said. “The downside is that if there is some sort of interruption, the data is lost. With the DS 1100 from Solera Networks, we have the data, and can still deliver it. That is the most important thing.

*“Being able to do more with the solution than just meeting strict CALEA compliance is one of the most valuable reasons we went with Solera Networks.”*

**Charles Boening**  
Network Manager  
Cal-Ore Communications Inc.

**Contact a Solera Networks solution provider, or call Solera Networks at:**

Solera Networks Headquarters  
355 South 520 West  
Suite 225  
Lindon, Utah 84042  
1 877-5SOLERA (877-576-5372)  
1+ 801-623-5705  
1+ 801-623-5706 fax

Email: [info@soleranetworks.com](mailto:info@soleranetworks.com)

Web: [www.soleranetworks.com](http://www.soleranetworks.com)

Solera Networks Japan, Inc.  
Shinjuku Park Tower N30F  
3-7-1, Nishi-Shinjuku  
Shinjuku-ku, Tokyo 163-1030  
1+ 81-3-5326-3367  
1+ 81-3-5326-3001 fax

Email: [info@soleranetworks.co.jp](mailto:info@soleranetworks.co.jp)

Web: [www.soleranetworks.co.jp](http://www.soleranetworks.co.jp)

© 2008 Solera Networks. All rights reserved. Solera Networks, Solera DS Series, DeepSee, Solera V2P Tap, DS 1150, DS 3150, DS 5150, and See everything. Know everything. are registered trademarks of Solera Networks. All other company names, brand names and product names are the property and/or trademarks of their respective companies.

 **SOLERA**  
NETWORKS  
See everything. Know everything.™