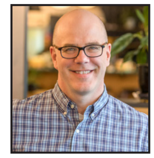
prevent an entire class of malware attacks related to buffer overflows.

There have already been several high-profile incidents in the oil and gas industry where RASP and randomization could have prevented the attack. In August 2017, Schneider Electric's Triconex SIS (Safety Instrumented Systems) controllers were infected with Triton malware at a Saudi Aramco facility in the Middle East. Attackers gained access to the SIS engineering workstation to plant first stage malware, then downloaded new malicious code. Some controllers entered a failsafe state which automatically shut down the industrial process and prompted the owner to begin an investigation. In a case like this, cyberhardened SIS controllers could have completely prevented the attack, because the malware would not have been able to replicate.

RASP is easy to implement and requires no new additional investments, software, services or hardware and only a one-time transformation with limited overhead. No access to source code complier, or operating systems is needed. Finally, RASP doesn't require alerts to monitor, and it is remotely deployable, as binary code can be cyberhardened via API.

Because of all the benefits, RASP adoption is increasing. According to a report by MarketsandMarkets, the RASP market is expected to grow at a compound annual growth rate of 33 percent to $1.24 billion by 2022.

The cyberthreats against the oil and gas industry are more complex than ever before. Moving from traditional security defenses to cyberhardening binaries can reduce risk by stopping attacks before they can execute.



Joe Saunders is the founder and CEO of RunSafe Security, a pioneer of cyberhardening technology for embedded systems and devices and industrial control systems. Joe is on a personal mission to transform cybersecurity by challenging outdated assumptions and disrupting the economics that motivate hackers to attack again, and again and again.

Oil and Gas Acquisition Market 2019 Outlook

By Josh Robbins

The last few years I have written about the Market Outlook in the acquisition market for the coming year. For the most part, these outlooks are nothing more than reporting back to the reader the information I hear every single day. I don't deal in global politics or billion dollar deals, so I have no input on any of those ideals/transactions and never factor them in to the bottom line of transactional expectations. With that being said, there is a strong indication that the price of oil will continue to rise throughout 2019. And should oil continue to rise, the exits of private equity backed or 3rd / 4th generation family owned firms may take the opportunity to materialize. We expect February NAPE to be extremely busy. Deals on top of deals busy.

Even prior to NAPE, the deals will be publicized on a greater scale in 2019. With social media being such a large part of everyone's life, information travels much quicker than in years past. Reporting sources (like OILMAN Magazine) have access to better, more accurate information, and are able to inform their readers of transactions in nearly real-time.

We expect a significant amount of deals that are under $100 million to close in Q1. Blocked positional pieces that have been the focus of infield drilling will start to work up exit strategies in Q2 and Q3 (but the exits will be driven by oil price). Targeted acquisitions will still be the most prevalent change in the acquisitions market. Big data will play a significant role in acquisitions in 2019 (and through 2020).

Josh Robbins

The Permian market will have dynamic changes as midstream companies continue to build and fund the growth. The differentials will only last for so long before competition within the midstream sector eliminates that differential entirely. It will take time, but being in the field we have seen a culture shift, and being in the office, we have seen a view change of investment dollars into a differential driven world. As those investment dollars are eliminated, so does that differential.

Gas continues to rise, and as I've previously written about, that was where the largest acquisitions and opportunities were in 2018. The 10-year state land that New Mexico sold may have made the largest newspaper headlines, but the biggest splash were the companies that bought when gas was trading at just over a dollar.

I'm seeing a number of deals come through our office (about six per day) and that tells me that 2019 is going to be a very busy year.

Oil and gas companies that are considering an acquisition strategy are using the days strip price, rounded to the nearest dollar. Whereas the average seller's baseline barrel price is, on average 26 percent higher than strip pricing. Unless you are equipped with a target marketing strategy, you won't be able to transact in 2019 using the same economic projections that everyone else is using. You have to visit directly with the sellers to understand this price difference.

Beachwood Marketing, the trusted leader in target acquisition marketing, is focused on helping clients acquire off-market oil and gas assets. Visit www.beachwoodmarketing.com for more information. Connect with Beachwood Marketing on Twitter @beachwoodmg or with Josh Robbins on LinkedIn www.linkedin.com/in/joshatbmg.