

solutions that work

# OPTIMIZATION FOR RELIABILITY

PETER CREMER UPDATED INFRASTRUCTURE FOR INCREASED  
SECURITY, RELIABLE PRODUCTION UP-TIMES AND EXCELLENT  
INTERNAL CUSTOMER EXPERIENCE

**CASE STUDY**



**CREMER**

The world is our market.

## EXECUTIVE SUMMARY



### DILEMMA

Facing aging hardware, restricted scalability, and minimum control of their data center Peter Cremer NA was facing a situation that was no longer tenable from a data latency or network uptime perspective.



### SOLUTION

Provide a robust compute/storage/switching infrastructure consisting of Meraki Switching, Cisco UCS Compute, HPE Nimble Storage, VMware, and Veeam.



### RESULTS

Peter Cremer NA now has less fear related to the virtual machines that run the production PLC, less fear of hardware failures and multiple UCS's that allow for controlled shutdowns when power outages occur to protect the data.

## STAYING AHEAD OF THE CURVE

The ability to keep up with demands while trying to improve efficiencies and uptime is a challenge that all manufacturers face.

Having the correct technology infrastructure and backup solutions in place is critical to this mission.

For Peter Cremer North America (part of CREMER based in Hamburg, Germany), a globally sourced and domestically serviced oleochemical supplier, delivering quality, naturally derived oleochemicals and contract manufacturing to fit any need without sacrificing production and service targets is a must.

## DANGERS OF DOWNTIME

Any pause is costly to manufacturers when it comes to downtime and loss of productivity. Ensuring that all equipment is functioning optimally therefore remains a key priority for manufacturers like Peter Cremer NA.

An example would be the Windows Virtual Machines that manage the production process (PLCs – Programma-

ble Logic Controllers) and are highly sensitive to any network interruptions.

## ACROSS THE TRACKS

Peter Cremer North America has a 3 building campus located in Sedamsville on the Ohio River right outside of Cincinnati, OH.

The buildings are separated by railroad tracks with a compute infrastructure in the Manufacturing facility, but in order to connect this to the other facilities, a point to point connection was required from each side of the tracks to the existing collocation site.

This situation was no longer tenable from a data latency or network uptime perspective.

"Peter Cremer NA was changing drastically as a company and going through some pretty heavy growth over a few years and what we currently had wasn't what we needed for where we needed to be so we needed a solution that was going to fix that," said Jim Hobold of Peter Cremer NA

## SOLUTIONS FOR OPTIMIZATION

Fortunately, Peter Cremer was able to coordinate with a county sewer project in the area and had the opportunity to install a private OM4 dark fiber optic





# 98%

## OF MANUFACTURING ORGANIZATIONS SAY A SINGLE HOUR OF DOWNTIME COSTS OVER \$100,000.

\*INFORMATION TECHNOLOGY INTELLIGENCE CONSULTING.

cable under the tracks and connect the manufacturing facility to the packaging facility.

The new 10gb connection provided an opportunity to greatly enhance their data speed and reliability between buildings. This also improved their ability to meet disaster recovery objectives.

Peter Cremer brought in Emerge for design and implementation so that they could restructure their network and utilize the dark fiber.

Emerge recommended a robust solution to modernize the data center and network infrastructure. This included the design and implementation of technologies including Cisco UCS Compute, HPE Nimble Storage, VMWare virtual infrastructure, and Veeam for disaster recovery.

With the new design, the data center was relocated to an alternate building on the campus. Attention to details such as cooling and electrical systems were taken into consideration in addition to the modern IT infrastructure that was implemented.

In addition a second redundant UCS and Nimble Array was located on campus in a different building for an additional layer of redundancy so that they can continue with their business critical applications in the event of a primary data center outage.

### RELIABILITY IN THE HYBRID CLOUD

By implementing cloud computing, manufacturers can reduce costs, gain greater quality control, and increase the speed of production. Unfortunately the manufacturing industry in general is still taking time to warm up to Cloud based technology due to connectivity and security concerns.

Peter Cremer, on the other hand, jumped right in knowing that backup and disaster recovery was a perfect fit to begin benefiting from cloud services.

While Peter Cremer is engaged in the on-going management of their new IT environment, they trust Emerge as a partner to assist in the day to day IT operations. Emerge provides managed services of the data center and network infrastructure, 24x7x365

in addition to a fully managed cloud backup service. By extending IT operations to include Emerge's managed services platform, Peter Cremer can rest assured that they are covered with ample expertise and a deep bench of engineers at the ready to help if the need arises.

### MOVING FORWARD

Now, Peter Cremer has less fear related to the virtual machines that run the production PLC environment, less fear of hardware failures, and increased confidence in failover capabilities if power outages occur. This is all accomplished by leveraging the power of Cisco UCS data center and HPE Nimble storage solutions.

Constantly evolving, now in the project of upgrading the Veeam (Cloud Connect) version that will allow a recovery point objective (RPO) substantially shorter than could be achieved through traditional snapshot backups. This will allow Peter Cremer NA to get the factory back up and running in a quicker fashion if there is an issue.



Restricted scalability  
and minimum control  
of the data center.



Robust  
compute/storage/switc  
hing infrastructure  
solution from Emerge.



Less fear related to the  
virtual machines that  
run the environments &  
hardware failures.



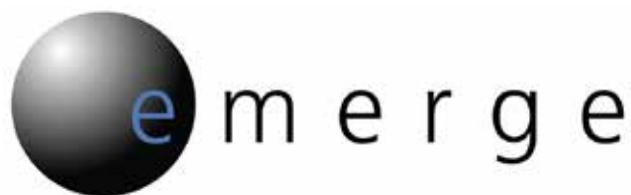
Multiple UCS's that allow  
for controlled shutdowns  
when power outages  
occur to protect the data.



Upgrading the Veeam  
(Cloud Connect)  
version that will allow  
substantially shorter  
recovery point  
objective (RPO)



*EMERGE BROUGHT THEIR BEST  
FOOT FORWARD AND WERE  
CONFIDENT IN THEIR  
RECOMMENDATIONS AND THE  
SOLUTIONS WERE IN LINE WITH  
WHERE WE WANTED TO BE. THAT  
CONSISTENT EXPERIENCE  
CONTINUED THROUGH BIDDING  
AND ON-BOARDING."*  
JIM HOBOLD



Emerge  
1895 Airport Exchange Blvd, Suite 170  
Erlanger, KY 41018  
859-746-1030



[www.emergeits.com](http://www.emergeits.com)