

Our mission at NexTech Solutions (NTS) in supporting the tactical community is to build solution for remote/tactical users and provide full automation capabilities that enable a true tactical cloud computing environment. There are many ways to approach this challenge, but we believe the following technologies offer best-of-breed solutions to the mobility needs of our customers.

## PHYSICAL PLATFORM

Our challenge in creating this solution was addressing the Size, Weight and Power (SWaP) concerns of the forward operating environment. This has traditionally been a limiting factor in the types of services and functions that can be deployed to the operator.

The Klas Telecom Voyager TDC (Tactical Data Center) is purpose-built with these factors in mind. For the first time, **a single operator can deploy and re-deploy their own full-function data center quickly, and in any location they desire.**



**VOYAGER/TDC**

vmware  
READY

## VIRTUALIZED NETWORKING & STORAGE

We live in a software-defined world. Why not ensure your edge data center takes advantage of the same technology? Application mobility requires a network that adapts with the application itself. VMware NSX delivers on this requirement. Adaptive Micro-segmentation is built-in and brings workload-level security-restricting East-West traffic in addition to traditional North-South firewalls.

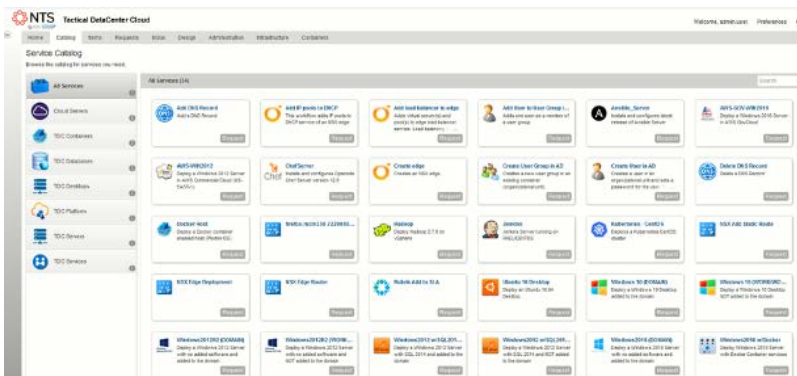
Integrated Layer 3 routing and Layer 2 VPN options allow the seamless extension of VLANs to the Cloud **without the need for additional physical devices, reducing your footprint at the edge.** The Voyager TDC is also officially supported by VMware vSAN, delivering high-performance software-defined storage in a small footprint without compromise.

- AIRLINE CARRY-ON FORM FACTOR
- TACTICAL 10 GIGABIT ETHERNET SWITCH
- UP TO 512 GB RAM AND 32 PHYSICAL CORES
- UP TO 16 REMOVABLE 2.5" SATA SSDS
- NVME M.2 PCI EXPRESS
- AC/DC POWER INPUT, BUILT-IN UPS, INTEGRATED BATTERY BACKUP
- MIL-STD-810G CERTIFIED & IP67 RATED

## AUTOMATION & ORCHESTRATION

The portability and modularity of this solution can only lead to mobility if it can be deployed quickly and correctly. We have developed a **“Single Pane of Glass”** application to create custom ESXi ISO's, bare metal install ESXi, deploy vCenter, create vSAN cluster, deploy NSX, and applications.

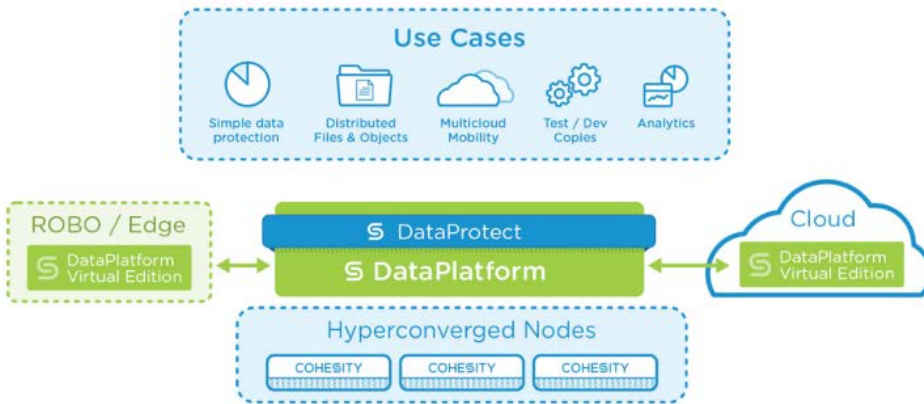
Our team perfected the use of VMware vRealize Orchestrator (vRO) and vRealize Automation (vRA) to enhance the Tactical Edge platform while deployed. The easy-to-use service catalog **allows administrators to deploy the right workload, with the right configuration, every time.** Our platform makes it easy to train new operators, insert new technology without new hardware, and gracefully scale and integrate new services as mission requirements change.



## DATA MOBILITY

We provide everything you need for data synchronization in one easy-to-use, scalable solution. Keeping the assets up-to-date is another challenge, whether it is domain replication, DISA STIG, HIPAA software compliance, or Corporate policies. We leverage multiple technologies from premiere storage companies such as **Rubrik** and **CoheSity** to manage the data lifecycle, ensure mobility, and to prevent rebuilds. These data mobility platforms allows our system to **rapidly ingest, encrypt, de-duplicate, compress and then replicate entire enterprise services across the WAN to a remote locations and the harshest of tactical environments.**

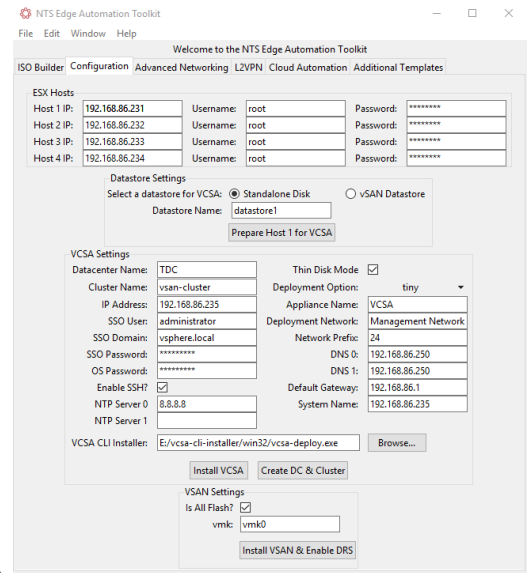
When the remote or deployed mission stands down, administrators can now **instantly resume and protect those services** back in the garrison/home environment, without large and time-consuming data transfers. In addition to running and protecting operations, we can replicate data back to the enterprise datacenter, or the Cloud. This **dramatically minimizes deployment, re-deployment, and disaster recovery times – reducing manpower.**



## OPTIMIZING & MONITORING NETWORK TRAFFIC

Once the Modern Tactical Edge solution is deployed, the next challenge is often network connectivity. Our solution allows for disconnected operations, but also addresses the constraints of poor connectivity. Utilizing products from our long-time partner **Riverbed**, our solution reduces unnecessary traffic and optimizes communications to maximize the operator's application experience.

We deploy Riverbed SteelHead as a virtual instance in the edge data center, as well as at the traditional DC and in the Cloud to optimize applications like Office 365. Riverbed SteelCentral provides a rich dashboard for monitoring the operation of the network.



NTS MANTLE is a suite of tools that leverages modern cloud-native technologies to deploy infrastructure components and software services to the Warfighter. It extends the power of the organization's CORE services to the outer layer, or deployed EDGE.

It makes infrastructure deployment a rapid, repeatable process. It drastically reduces the resources needed to deploy, eliminates configuration inconsistencies on any H/W platform, and does so without compromising the system's capabilities. MANTLE automatically provisions infrastructure components, deploys modern workloads, and verifies the integrity of the configuration before safely shutting down and preparing for deployment.