

# Hercules Compute



## What

Container management & deployment platform. 1 click deployment of full decentralized Kubernetes environments at the edge or in core data centers in full scaleout mode.

The hercules product range is sold from out of TFTech to our partners and customers. It's using the features of our Zero-OS and Automation platform: Jumpscale. The virtual system administrator 3bot is your assistant to make all of this possible.

## Main Benefits

### Reliable

- Hercules Protect: no hacking surface to the Zero-Nodes, integrate silicon route of trust
- Hercules Network: encrypted overlay network connects the containers
- Hercules Filesystem (v2.2): dedupe, zero-install, hacker-proof for use in containers
- Hercules Web Gateway: intelligent connection between web (internet) and container services

### Strong

- Hercules Scale: Unlimited Scalability (IT capacity & deployment layer scales independently)
- Hercules Containers: Docker compatible
- Hercules Protect: Kubernetes files fingerprinted, defined in blockchain, 0-hacker footprint
- Hercules Disk (2.3): ultra reliable redundant block storage

### Smart

- Hercules Smart Contract:
  - blockchain supported deployment of workloads (any) = smart contract for IT
  - fine-grain control over where to deploy
  - multi-signature
  - Verification of location, governance steps
  - Auditability
- Hercules Monitoring: Prometheus/Grafana based
- Hercules Admin (2.3):
  - manage one million instances as easy as 1
- Hercules Bot (2.1):
  - talk with your private virtual system admin assistant to repair, manage your deployment
- Hercules Boot:
  - +5 different ways how to boot the zero-nodes (ready for global deployments)
  - blockchain support in bios (Zero-OS TBD version)

## Features

- 100% compatible with Kubernetes & docker (market std)
- integration with zero-os overlay networking layer (efficient, ultra secure (encrypted) network between the containers)
- can be easily deployed at the edge
- integrated with scalable & capable monitoring system (prometheus based), deployed by default
- can be integrated with our advanced billing/charge back mechanism
- Single-tenant!

## Roadmap

### v2.1: Active

- integrated with our web based bot solution: interactive workflows for deployment/upgrade/troubleshooting (chatbots in jumpscale)
- Custom logging: Zero-OS Alerts & Logs to a memory database of choice for customer (redis)
- Statistics aggregated in memory database of choice for customer (redis)
- zero time boot: the use of our ultra-efficient virtual filesystem allows boot in seconds without downloading of docker images (v1.2)
- edge cloud efficient virtual filesystem: deduped virtual filesystem leads to huge space & bandwidth savings
- hacker proof launch of files: each file started get's compared against a secure hash making sure only the pre-defined files can be launched in a container
- redundancy for Kubernetes controller

### v2.x: OEM (on request by larger customers)

- Hercules Admin
- Hercules Virtual Disk integration