

GTUptime

**GTMaritime's Fault Tolerant
Server Solution**





GTUptime

GTMaritime's server system builds in a replicated instance of all components. In the event of a component malfunction, the partner component acts as an active spare that continues normal operation it detects and handles faults before they cause downtime. Because this is not a fail and recover process the **GTUptime** server offers 99.999% availability.

Conventional systems use a standby server that only replicates data between the two systems and requires intervention to bring the standby server into an active state. This means downtime and potential ship visits in order to return the system back to an operational state.

Utilising Thin Clients with the **GTUptime** server builds a robust and reliable network with no more uncontrolled PC environments causing costly malfunctions and operational downtimes.

Centralised application and data storage simplifies management and security risks are reduced. Thin Clients are more cost effective, power efficient and reliable than traditional PC's.

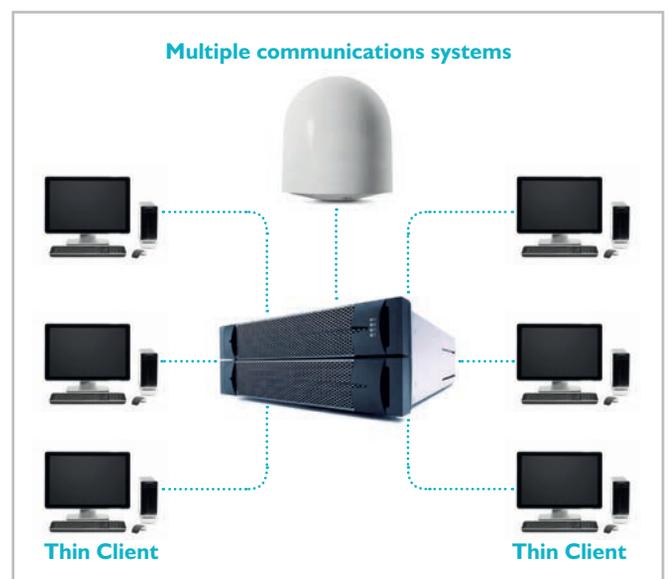
This is all backed up by our PROACTIVE AVAILABILITY MANAGEMENT system where the server will report back to the **GTMaritime's** SOS (**GTMaritime's** Support Operational Services) for fault reporting, analysis and spares ordering 24-7/365.

Keep your ships network running 24/7

The **GTUptime** server solution takes the risk out of allowing crew members to use the IT system. In the past crew members would take on board memory sticks and external storage items such as disks that would then transfer viruses to the ship. With the **GTUptime** server solution this isn't possible meaning risks are vastly reduced.

Simply power up the server and load your applications to benefit from our continuous processing technology. When business or mission critical applications demand continuous uptime there is no reason why you should settle for less and with our **GTUptime** server you don't have to.

Using the most reliable technology within one of the most reliable servers in the world our innovative solution eliminates the operational complexity and high costs inherent in approaches such as clusters. Making the industries ultimate level of uptime protection more practical and affordable than ever.



GTMaritime example set up

Buying Guide

DOES THE SYSTEM OFFER THE OPTIONS BELOW:	SINGLE SERVER	CLUSTERED SYSTEMS	UPTIME SERVER SYSTEM
Failsafe to faults	X	X	✓
Data loss protection	X	X	✓
Designed to recover quickly	X	X	✓
Easy management including if there is a fault	X	X	✓

Traditional Solution

This is traditionally a PC with some form of back up taking place with disks or programmes.

Our Solution

A unique resilient server with back-up server, multiple thin clients, software, monitoring equipment and support from our SOS support team.

Why you need to invest

Operational Simplicity

Bid farewell to the complications of cluster deployment and on-going maintenance. By integrating continuous processing capabilities into every system we ship, we eliminate failover scripting, repeated test procedures, and cluster-aware. The server provides zero failover time and critical protection for data in memory as well as on disk, big advantages you don't get from clusters. As a result, your IT staff are free for other projects that are priority for your business' success.

Failsafe Technology

Our failsafe software works in concert with lockstep technology to prevent many software errors from escalating into outages. Unlike typical servers or clusters, **GTUptime** hardware and software handles such errors transparently, shielding the operating system, middleware, and application software. Even in-memory data is constantly protected and maintained.

Lockstep Technology

This technology uses replicated fault – tolerant hardware components that process the same instructions at the same time. In the event of a component malfunction, the redundant

component provides an active spare that continues normal operation and averts system downtime. The **GTUptime** server eliminates transient hardware errors that could cause software failures if left unchecked.

While other servers may offer duplicate power supplies, fans and disk drives only, the **GTUptime** server provides fully redundant core system components including motherboards, processors, memory, I/O buses, and I/O adapters.

Financial Advantage

Competitively priced the **GTUptime** server cuts the cost of on-going support expenses and unplanned downtime resulting in 99.999% yearly uptime. Unrelenting pressure on performance and budgets means that businesses are placing greater reliance on IT. But IT budgets and resources are also caught in the squeeze. As if these pressures aren't enough, rapid implementation becomes a requirement. Strategic purchases save money, increase revenue, improve effectiveness and enhance customer satisfaction.

Learn more about GTUptime. Speak to our sales team today.

E: sales@gtmaritime.com T: +44 (0) 1925 818918



Product specifications

ftServer System Specifications	2810	4810	6810
Processors			
Logical processor	1-socket per customer replaceable unit (CRU)	2-sockets per customer replaceable unit (CRU)	2-sockets per customer replaceable unit (CRU)
Processor	Intel® Xeon® processor E5-2630v4, 2.2 GHz	Intel® Xeon® processor E5-2630v4, 2.2 GHz	Intel® Xeon® processor E5-2671v4, 2.3 GHz
Intel QPI speed	8.0 GT/s	8.0 GT/s	9.6 GT/s
Maximum memory bandwidth	68.3 GB/s	136.6 GB/s	136.6 GB/s
Memory			
DIMM slots	16 (8 per CRU)	32 (16 per CRU)	32 (16 per CRU)
Embedded I/O			
10/100/1000 Ethernet ports	4 (2 per CRU)	4 (2 per CRU)	4 (2 per CRU)
Serial (com) ports	2 (9-pin) ports per system	2 (9-pin) ports per system	2 (9-pin) ports per system
USB ports	4 USB 2.0 and 4 USB 3.0 (non-redundant)	4 USB 2.0 and 4 USB 3.0 (non-redundant)	4 USB 2.0 and 4 USB 3.0 (non-redundant)
Operating System			
Microsoft	Windows Server 2016 and 2012 R2 with Hyper-V™ virtualization	Windows Server 2016 and 2012 R2 with Hyper-V™ virtualization	Windows Server 2016 and 2012 R2 with Hyper-V™ virtualization
vSphere 6.5	vSphere 6.5	vSphere 6.5	vSphere 6.5
Red Hat	Red Hat Enterprise Linux 7.4	Red Hat Enterprise Linux 7.4	Red Hat Enterprise Linux 7.4

Learn more about GTUptime. Speak to our sales team today.

E: sales@gtmaritime.com T: +44 (0) 1925 818918