Edge for All Business
Datasheet

Zynstra is designed and built for the edge – the business-critical compute activity that takes place outside a large central datacenter, in branches, remote offices, or small sites. While traditional approaches attempt to stretch datacenter equipment to fit to the edge, Zynstra leverages intelligent automation to transform the way thousands of distributed sites are managed, driving down operational costs, better managing risk, and establishing a lasting platform where new innovative applications and services are tested and launched.

Overview

Zynstra's products comprize on premise, Cloud, and support services:

- *Deployed on premise, Zynstra Intelligent Edge servers provide local IT services and virtual machine resources for custom applications, running on resilient enterprise-grade software and hardware.*

- *The Zynstra Intelligent Control Plane provides IT staff with remote configuration, management and monitoring of their Zynstra Intelligent Edge server inventory.*

- *The Zynstra Support Team provides on-going monitoring, patching and update services.*

How it Works

The Zynstra Edge solution is comprized of two integrated components:

The **Intelligent Control Plane** enables the provisioning, management, control and updating of hundreds or thousands of servers and server workloads across your complete distributed estate. It simplifies and accelerates what would otherwise be complex IT tasks, while ensuring a consistent, secure IT environment in every location.

The Intelligent Control Plane makes sure that everything is running smoothly, and if you roll out a new site, it is delivered as it is supposed to be. It makes sure that all patches and updates are automatically applied and is continuously tested to ensure everything is running correctly.

Components of the Intelligent Control Plane include:

- **Command Center.** *A cloud based interface for monitoring and management of all your Intelligent Edge servers.*

- **Automation Manager.** *Governs new site provisioning, patching, updating, backup and numerous other processes.*

- **Configuration Manager.** *The centralized database of edge server configuration and state, across all sites.*

The Intelligent Edge is a virtualized server located in your branch, office or site. It's an edge-scale, hyperconverged core, comprizing of tightly integrated compute, storage, networking, and infrastructure services. It provides a virtualized platform for local applications and provides infrastructure services such as file management, firewall, user management, secure networking and system back-up.

The Intelligent Edge server is available in a number of hardware configurations, each right-sized for the edge environment. Zynstra's Intelligent Edge improves on cost, space and environmental needs, compared with traditional datacenter-based hyperconverged technology.

The combination of an Intelligent Control Plane and Intelligent Edge replaces the need for multiple server and storage devices onsite while ensuring the full lifecycle of the server and its application can be managed through a single Cloud-based service.

Components of the Intelligent Edge include:

- **Edge Scale HCI Core.** *Edge scale hyperconverged infrastructure delivers virtualized compute resources, networking and simplified storage provisioning.*

- **Edge Infrastructure Services.** *An array of essential IT infrastructure services, deployed as part of the automated new site provisioning process.*

- **Your Applications.** *Secure, high-performance virtual machine hosts for local applications.*

Features

Several features are available to all Zynstra customers deploying Intelligent Edge servers, managed using the Intelligent Control Plane. This constitutes the Zynstra Core Product features, below.

Optional add-on products provide additional features or third-party software licenses. These are listed separately in this section.

Zynstra Core Product

A core product subscription provides Zynstra's hyperconverged technology and IT services for a single virtualized edge server, with use of the Zynstra Intelligent Control Plane to manage each server.

To combine two servers in to a High Availability cluster, a core product subscription is required for each.

Cloud Managed

- **Command Centre.** *Monitoring, management and automation for IT teams or your IT partner. Manage all your virtualized edge servers from the Cloud, and rapidly provision new sites using the Command Center's Commissioning Console. Access detailed event and diagnostic information from the Command Center's Monitoring Console.*

- **Local Dashboard.** *The Command Centre's User Control Console provides easy to understand per-server service status monitoring, intended for local super-users or office administrators.*

Keep Current

- **Keep Current.** *Edge Server HCI Core, Infrastructure Services, and curated applications provided by Zynstra are regularly patched and updated.*

- **Keep Secure.** *Zynstra's control plane and servers are secure, monitored and automatically able to identify both internal and external security threats.*

- **Keep Running.** *Self-healing architecture, performance monitoring and tuning.*

Application Hosting

- **Virtual Machines.** *Compute capacity to host your applications. Allocate CPUs, RAM and storage to virtual machines for local applications that benefit from the security and reliability of the Edger Server HCI Core.*

- **High Performance.** *Edge servers support both RAM and SSD caches, in addition to multiple hard disks. The user file system, applications running in VMs, and all other components of the server benefit from improved read/write performance.*

Network Services

- **DNS and DHCP.** *Critical network services on-premises.*

- **Firewall.** *ICSA certified firewall gateway to the Internet protects LAN-side applications, data and users.*

- **VLAN.** *Virtual switch supports secure LAN configurations allowing segregation of shop floor, back office and guest networks.*

- **VPN.** *Secure remote access to services for users and IT administrators.*

- **IPsec.** *Securely connects multiple sites using IPsec over the public Internet.*

User Services

- **File Share.** *Individual file storage and group file shares on resilient high-performance disk arrays.*

- **Active Directory.** *User credential management and local domain controller services.*

Reliable & Resilient

- **Resilient Storage.** *Support for redundant disk arrays to ensure that, if a hard disk fails, your server continues to work and your data remains available.*

- **Local Backup.** *All data, including your application virtual machines' data, are backed up locally on the server reducing the risk of files becoming lost or corrupted.*

High Availability

- **Dual-node Cluster.** *Two Zynstra Intelligent Edge Servers working together to remove single points of hardware failure, increasing up-time and resiliency.*
- **Data Replication.** *Data is automatically replicated between each node, making it available during a fail-over event while also increasing overall data resiliency.*
- **Active-Active Load Balancing.** *In normal conditions, VMs benefit from the compute resources of both nodes in the cluster. In the event of node failure, affected VMs are started-up automatically on the remaining node.*

Support and Managed Services

- **24x7 Support.** *Phone and email support 24 hours a day for high priority issues affecting your Zynstra solution.*
- **Service SLAs.** *Published SLA for target response and resolution times.*
- **Access to Updates.** *The right to software updates for licensed Zynstra software.*
- **Managed.** *The Zynstra Support Team provides assistance for the lifecycle of the solution including configuration, patching, update roll-out and general support.*
- **Monitored.** *Proactive monitoring of the Zynstra platform and curated applications, identifying performance, reliability and security issues.*

Business Continuity Product Options

Cloud Backup and Disaster Recovery

Cloud Backup and Disaster Recovery moves encrypted backups of your data and applications to Zynstra's cloud storage. As part of the service, Zynstra's Support Team assist in the recovery of individual files, directories or even the entire server.

- **Cloud Backup.** *Secure, nightly backup of the entire system to cloud storage, inclusive of all Cloud storage costs, for a predictable subscription price.*
- **Disaster Recovery.** *Temporary access to users' data and server applications in the cloud in the event of a major outage, followed by data restoration to replacement hardware.*
- **Backup Archive Retention.** *Choose either 30-day or 1-year retention of backup archives in the cloud.*

Curated Application Product Options

Curated Applications are available for a number of core IT services that are often required locally, on premise.

Curated Applications are deployed from Zynstra VM images as part of the server commissioning process, kept current as part of the regular Zynstra maintenance process, and monitored from the cloud.

Choosing a Curated Application reduces installation time, simplifies configuration, and ensures the applications are kept secure thanks to regular updates by Zynstra.

Gateway

The Gateway provides a fully featured next-generation firewall, monitored and kept current as part of the Zynstra service.

- **Firewall.** *ICSA certified firewall gateway to the Internet protects LAN-side applications, data and users.*
- **Web Filter.** *Enables blocking of inappropriate web content in real-time. The URL categorization engine makes it easy to block websites in over 140 categories.*
- **Bandwidth Control.** *Control and visualization of network traffic at a fine-grained level.*
- **Virus-Blocker.** *On-the wire anti-virus scanning automatically scans HTTP, FTP and SMTP traffic.*

Microsoft Remote Desktop Services

Deliver desktop or client applications to end-users with Microsoft RDS. This product option provides a user license for accessing Custom VMs, and includes the use of Zynstra's managed, kept current and monitored RDS broker VM.

- **User RDS Access to Custom VMs.** *A Microsoft license for individual users to access a Zynstra Custom VM using RDS.*

- **Pre-configured RDS Broker.** *An RDS broker will be installed as part of the server commissioning process. Desktops or client applications can be deployed into a Custom VM on the server by your IT team or IT partner.*

- **Keep Current.** *RDS broker updates are regularly rolled-out by the Zynstra Intelligent Control Plane, automatically keeping the RDS broker software up-to-date.*

- **Monitored.** *Includes Zynstra monitoring agents and processes to monitor the RDS broker service availability and capture logging information.*

  Note – In addition to these RDS user licenses, two or more Windows Server licenses must be purchased to host RDS services: One to host the RDS broker and at least one to support the desktop or application payloads.

Microsoft Windows Server

Deliver applications using Windows Server. This product provides a Windows Server operating system for a Custom VM and curated applications such as the RDS broker. Windows Server is pre-integrated with Zynstra's monitoring and backup functions, quickly deployed, and automatically configured as part of the Zynstra server installation process.

Two versions of Windows Server are available:

- **Single Instance for VMs.** *Windows Server supplied as a subscription price for deployment into a single Custom VM*

- **Unlimited Instances for VMs.** *Available as a subscription price for unlimited Windows Server instances for deployment into Custom VMs*

Hardware

Zynstra Product	Z1810	Z1820	Z1830
HPE ProLiant Server	ML110 GEN10	ML110 GEN10	DL380 GEN10
Form Factor	Midi-Tower	Midi-Tower	2U Rack
Maximum Disk Packs	2	4	4
CPU	8 Cores, 1.8Ghz	8 Cores, 2.2Ghz	8 Cores, 2.2Ghz
RAM (Base/Max)	32GB / 96GB	32GB / 96GB	64GB / 192GB
SSD Cache Option?	Yes - 240GB	Yes - 240GB	Yes - 240GB
Network Interfaces	1Gbps	1Gbps	1Gbps
Redundant PSU Option?	No	Yes	Yes
Dimensions (Approx.)	44.0x19.5x48.0cm	44x20x48cm	8.8x44.5x73.0cm
Acoustic Noise (Approx.)	25 dBA	25 dBA	37 dBA

Hardware Product Options

The base server provided with a Zynstra subscription must be populated with Disk Packs, and can optionally benefit from additional RAM and an SSD cache.

Disk Packs

Disk Packs are mirrored pairs of hard disks. So, for example, a 4TB Disk Pack provides a pair of 4TB HDDs. All disks are added as identical mirrored pairs of HDD, to ensure both resilience and consistent performance.

Disk Packs are available as pairs of 1, 2, 4, or 6TB disks.

Memory Packs

All servers include a base RAM configuration, which can be upgraded to accommodate memory intensive Virtual Machines. A RAM Pack is a single DDR4 DIMM, and are available in 16GB increments.

SSD Cache

The SSD Cache provides accelerated read/write performance by adding a single SSD drive to the system. The Zynstra file system automatically makes use of this by caching recent and frequently used files, complementing the server's hard disk array and RAM cache and accelerating performance of both Custom VMs and the File Share.

Redundant PSU

Add an additional PSU module for a redundant power supply.

About Zynstra

Zynstra is a software company formed by experienced technology and business entrepreneurs. The company has a track record in creating enterprise grade software, and delivering it into successful operation inside some of the most complex and rigorous IT organizations in the world.

UK
Bath Innovation Centre, Broad Quay, Bath BA1 1UD
+44 (0) 333 355 7055

USA Office
4500 140th Avenue N, Suite 101, Clearwater FL 33762
+1 (844) 996 7872

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