

The following outlines minimum system requirements for an eFresh server cluster. Although a wide range of system designs can be implemented VendTek requires these minimum specifications to be implemented in order to receive technical support for eFresh. VendTek reserves the right to decline to support customers with servers that do not meet or exceed these minimum specifications.

Within the context of minimum system requirements VendTek recommends a scalable and resilient system. It is referred to as the "Minimal Cluster Solution" or "Basic Enterprise Server". This is a fully redundant dual PC cluster solution also designed for startup and small scale operating networks. However, this solution is more scalable and inherently has more processing capacity compared to a non-clustered solution making it capable of handling a larger network. Although operating conditions and loads vary significantly from application to application this system will generally suffice for up to 5000 terminals. As the load increases the system can be scaled up while running.

An eFresh Server should be specified and constructed to provide a fully redundant system with the capability to operate 24 hours per day and 7 days per week (7/24) with zero downtime. Ideally it will be recoverable from any failure while it remains operational (a feature of the Clustered solution).

An eFresh server should also include a software backup solution that support Oracle online database backup, full uninterruptible power backup solution (UPS and power generator) and an alarm notification system. All components used should be certified for Microsoft and

Oracle software as appropriate.

There are many server architecture strategies and the capacities and resilience of any system can be easily enhanced with the addition of more resources. The server specifications in this document are intended to serve as a minimum requirement.

VendTek offers eFresh configured servers which delivered fully operational and pre-configured for your market. The cluster server solution offered by VendTek is described below.

## Minimum Clustered Specifications

Two Windows 2003 Cluster certified servers with standard features plus the following:

- OS: Windows 2003 Advanced Server Cluster (English)
- Database: Oracle 10g with Oracle Fail Safe
- RAM - minimum 2GB per node
- Processor - minimum 2Ghz
- RAID - a shared drive array linked to both server nodes with a minimum of 3 – 18GB drives
- UPS - to provide backup power supply and power filtering
- Telecom Hardware – 2 minimum (type based on application)
- Network Card – 2 minimum
- Internet connection for remote system support

## eFresh Enterprise Server Cluster Offer

VendTek offers the fully redundant and scalable enterprise level eFresh Server Cluster fully configured for your market and delivered as a "turn-key" (ready to go) system. Once delivered only regional customization will be needed. Included with this system is 5 days of on-site training and support for the initial commissioning of the system.

This turn key system saves you the time, cost and complications of procuring and configuring your own server for eFresh. This system is scalable and full redundant. It includes the operating system, Oracle, reporting and eFresh software installed, operating and certified.

This system is intended to provide support for operations of up to 5000 transactions per day. It can be scaled beyond this volume with the addition of new PC clients.

**The system includes the following:**

### Hardware

- Compaq ProLiant DL380 G3 Packaged Cluster, Two (2) DL380 Generation 3 Servers- 2.80GHz/512KB (512MB) and (1) Smart Array Cluster Storage, 2GB Total SDRAM PC2100 (4x512) per server, 18.2GB 15,000 rpm U320 Universal Hard Drive (1 HD per server), CD-ROM/DVD 24X Low Profile IDE CD-ROM Drive (1 per server )
- Shared storage system Smart Array Cluster Storage, Smart array cluster storage controller Smart Array Cluster Storage Controller - Included, three (3) - Shared storage hard drive 36.4GB U320 Universal 15,000 rpm Hard Drive (1")
- Compaq NC7781 PCI-X Gigabit NICs (embedded) 10/100/1000 WOL– 1 per server
- Storage controller Integrated Smart Array 5i Plus Controller - per server
- Redundant power supply Hot Plug Redundant Power Supply Module - 1 per server

- Redundant fan options Hot Plug Redundant Fans (3 fans per server)
- Rack mounting rails Standard Quick Deployment Rails
- HP StorageWorks DAT 72i Internal Tape Drive for ProLiant and AlphaServer Systems
- 16 Modems - 2 x 8 port Digi MultiModem Card
- UPS - 3000VA or better
- Standard Windows Keyboard, Mouse
- 17 inch LCD monitor

### Software

- eFresh Server, installation, configuration and testing (eFresh license sold separately)
- Operating system Windows Server 2003 Enterprise Edition Cluster (two copies) + 50 CALs, on CD
- Oracle 10g Standard (10 Named User Plus 1 Year license, renewable) with Oracle Fail Safe
- BrightStor ARCserve Backup v11 or better
- Crystal Reports Professional v10 or better

### Support

- VendTek support as per eFresh License agreement
- Hardware Support Services provided by HP (includes HP's standard one year warranty and support services)

### Standard Price

USD65,000 (FOB Vancouver)