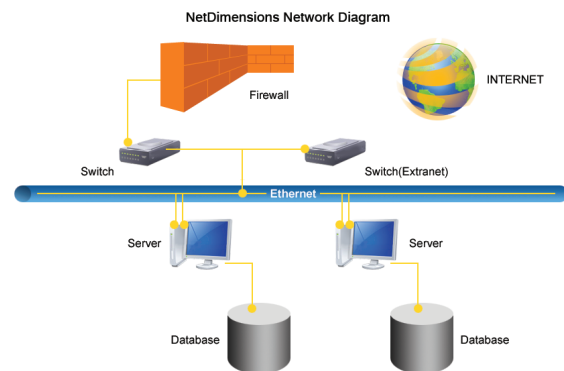


## NetDimensions Hosted and Managed Services

NetDimensions' Hosted and Managed Services are ISO 27001 certified, and meet global standardized requirements:

- ✓ Information security policies
- ✓ Organizing information security and incident management
- ✓ Asset management
- ✓ Human Resources security
- ✓ Physical and environment security
- ✓ Communications and operational management
- ✓ Access control and information systems acquisition
- ✓ Business continuity and compliance



### Technical Advantages:

- All system hardware, software and Database Servers (MS SQL2005) are supplied by an award winning third party IT services and hosting provider.
- Guaranteed one hour uptime on all hardware (Hosting Services excluded). Any hardware detected with a problem will be replaced within an hour.
- All systems contain the RAID 5+1 disk subsystem, which provides sufficient disk redundancy in case of hard disk failure. As a result, services will not be interrupted during the replacement of disks.
- NetDimensions Support Staff monitors capacity and performance continuously to ensure sufficient resources are available. When additional hardware or software resources are required, NetDimensions will schedule the needed upgrade according to an agreement made with the client.
- Software and database backups are completed by NetDimensions, as well as a third-party award winning third party IT services and hosting provider.
- To ensure a maximum level of backup protection, local and cross server backups in each system are carried out on a daily and weekly basis.
- Immediate investigation and troubleshooting carried out by NetDimensions is supported by technical expertise in Windows Operating Systems and Network Management.
- 100% Guaranteed up-time of firewall and network managed services.
- Our services run on Window 2003, MS SQL 2005 Database, Tomcat and Apache application servers, providing an easy to support, manageable and consistent environment.
- All production sites are monitored 24 x 7.

### Business Advantages:

- All operational and technical change conform to the need of ISO 27001 (Previously BSI 17799) Hosting Operations requirements and practice.
- Vulnerability of Operating System and Tools are minimized through periodical scans of servers by NetDimensions.
- Impact of system vulnerability is minimized by periodic checking and deployment of system patches.
- Hosted sites are supported by experienced and authorized Hosting Support Staff, all maintenance and upgrade responsibilities are handled by NetDimensions. Clients hold no responsibility for maintenance and upgrades.
- All application, system and software upgrades are to be handled by the Hosting Support Team according to Change Request Procedures.
- Quad Core CPU system with minimum of 4GB RAM and a RAID 5+1 redundant disk system.
- Each machine is equipped with Windows 2003 Operating System, MS SQL2005 DBMS, Tomcat and Apache application servers.
- 100% Network uptime guarantee – Each network, firewall (CISCO), switch and router is fully redundant.
- Network bandwidth is 100Mbps (i.e. max speed of the network interface).
- One hour guarantee for replacement of hardware spare parts.

# What distinguishes NetDimensions' ISO-27001-certified Hosting Services?

## Multi-layer Architecture

NetDimensions Application Hosting Services are implemented under a multi-layer architecture whereby Application and Database servers run on separate machines. This maximizes security and performance as the use of multiple virtual hosts allows each application server to service multiple customers – or just one.

Our SAN (storage area network) scheme allows for:

- Quick and easy replacement of faulty servers,
- Improved storage capacity utilization, and
- The implementation of highly effective disaster recovery processes.

Should an application or database server ever fail, a substitute system immediately takes over, temporarily serving until the underlying technical matter is resolved.

## Multi-dimensional Security blanket

Security is implemented at multiple levels:

- Logical
- Physical
- Environmental
- Risk Assessment

**Logical Security Control** means that only authorized personnel have logical access to the production system. Strict procedures regarding password expiry and terminal session timeout are enforced as part of a comprehensive, overall security policy. Hosting Operation team members can access the system either at the data centre or through remote a Virtual Private Network (VPN) protected by a high-security Triple Data Encryption Standard (TDES) scheme featuring a TDES-encrypted firewall. All access and event logs of the firewall and systems are captured and monitored regularly to ensure that no unauthorized access of systems occurs. Changes to the firewall can only be requested by select individuals.

**Physical Security Control** means that all production hardware and systems are located in locked rooms at the data center and can only be accessed if the requisite authorization is granted by NetDimensions. Any and all visitors of the NetDimensions Hosting Operations team are escorted.

**Environmental Security Controls** include a UPS, diesel generator, pre-action sprinkler system or FM200, smoke

detector, temperature and humidity controls to protect the production environment.

**Risk Assessment and Treatment:** The NetDimensions Security Committee regularly reviews and assesses rapidly changing threats, vulnerabilities and their potential impact on data and system assets. Any potential risk is contained through proper control by NetDimensions, and/or transferred to qualified third parties for elimination.

## Strict Change Management Controls

Only authorized staff, who are subject to internal audit and must follow strict policies and procedures that are periodically reviewed by management to ensure suitability and applicability, may access and effect changes to NetDimensions Application Hosting Services systems.

Software bug and enhancement requests are initiated and tracked in our problem tracking system. Strict change request control procedures are followed and only authorized change requests are deployed in the production environment. Prior to release, our software engineering and application QA teams review and resolve problems related to software bugs or customizations to ensure that proper testing and follow-up of each change for accountability, traceability and support purposes.

## Redundant Disk Arrays & Regular Backup

Application and database data reside on a Redundant Array of Independent Drives/Disks (RAID) system to ensure reliability as well as input and output performance.

Backups that include snapshots of both the database and courseware of the production sites are automatically performed on both a daily and weekly basis onto online disk arrays for fast recovery. Data at the offsite backups is encrypted for added security.

## Continuous Monitoring

Our NetDimensions Status Monitor continuously monitors each and every production application. Should any problem occur, our Hosting Operations Team is immediately alerted, either by e-mail, Short Messaging Services (SMS), or both.