



netloan 4.4
technical
requirements

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Technical specifications for netloan version 4.4

General specifications

The technical specifications for netloan vary depending on the following:

1. the number of netloan clients that your system has
2. whether you decide to run the netloan application and database on:
 - a. the same server
 - b. on two different servers

The specifications are based on a standard netloan installation (one that has no additional modules). Turn to page 5 and select the band that you belong to, and then choose the appropriate specifications depending on whether you are going to run the netloan application and database on a separate server.

Modules

By itself, a netloan module (charging, webstat, offline etc) does not significantly change the technical specifications. However, if you have several of the additional netloan modules you may consider moving up a specification band (e.g. if you have 180 clients but also have the charging, Wi-Fi and webstat modules you may wish to consider the specifications for Band C rather than Band B). Likewise, if you are right on the upper edge of a Band and buy a module, you should consider using the specifications for the higher band.

If you need any assistance making your selection, please give us a call on +44 (0)1992 415500 or email technical.support@lorensbergs.com.

Windows 2000 server and Windows 2000 SQL server

Both windows 2000 server and Windows SQL server 2000 are currently supported with netloan 4.4. However, Microsoft has begun to withdraw support for these products; mainstream support has ended for both Windows 2000 server and Windows SQL server 2000.

Windows 2000 server	Support ends 13/07/2010
Windows SQL 2000 server	Support ends 09/04/2013

Our present planning is that netloan 4.4 will be supported until June 2012. The new version of netloan (version 5.0 – available from January 2011) will NOT support either Windows 2000 server or Windows SQL 2000 server. Furthermore, our support for Windows 2000 server on netloan 4.4 will end when Microsoft's extended support ends for Windows 2000 on 13/07/2010. This means after that date, netloan will no longer be supported on Windows 2000 server.

Therefore, although we currently support Windows 2000 server and Windows SQL 2000 server we strongly recommend that if you are a new customer you do not use either of these products. For existing customers using these systems that are migrating to new hardware, we would recommend you use this opportunity to move to a later version of Windows server and Windows SQL server.

The bands

There are six bands of technical specification:

- Band A: Up to 100 clients
- Band B: 101 – 200 clients
- Band C: 201 – 400 clients
- Band D: 401 – 600 clients
- Band E: 601 or more clients

Band A: Up to 100 clients

Single server

- Operating system: Windows 2000 server, Windows 2003 server , 32 bit OS only
- CPU: CPU Speed 1.8 GHz, L2 Cache Speed: 1.83 GHz, L2 Cache Size: 2MB
- Memory: 1 GB minimum (recommended 2 GB)
- Software requirements:
 - IIS version 5 or higher
 - .NET Framework 3.5
 - Microsoft SQL server 2005 or Microsoft SQL server 2008
- Recommended software:
 - Anti-virus software, with an exemption for real-time scanning of the netloan installation directory and web pages

Please note: none of these are supplied by lorensbergs Ltd

- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:
 - UPS
 - Backup station
 - RAID system

Additional requirements

- Operating system for netloan client: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008

redistributable package version 9.0.21022.8 (supplied by lorensbergs)

- Operating system for netloan print: Windows XP Professional, Windows Vista Business, Windows 2000 or 2003 server, 32 bit OS only
 - Requirements for XP – Service Pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Requirements for Windows 2000 server – Service pack 4, Update rollup 1, 500 Mhz Pentium processor or faster, 256 MB of RAM
 - Requirements for Windows 2003 server – Service pack 2, 750 Mhz Pentium processor or faster, 512 MB of RAM
 - Note: If you are operating a print server system where multiple computers print to a single computer we do not recommend using XP or Vista for this computer
- Operating system for netloan kiosk: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Staff administration PCs: A compatible web browser (one of Internet Explorer 6.0 or higher, Opera version 9.6 or higher, Mozilla Firefox version 3.07 or higher, Safari version 3 or higher or Chrome 1.0 or higher). Optimal resolution 1024x768.

Separate servers

Application server

- Operating system: Windows 2000 server, Window 2003 server , 32 bit OS only
- CPU: CPU Speed 1.8 GHz, L2 Cache Speed: 1.83 GHz, L2 Cache Size: 2MB
- Memory: 1 GB minimum
- Software requirements:
 - IIS version 5 or higher
 - .NET Framework 3.5
- Recommended software:
 - Anti-virus software, with an exemption for real-time scanning of the netloan installation directory and web pages

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- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:
 - UPS
 - Backup station
 - RAID system

Database server

- Operating system: Windows 2000, 2003 or 2008 server, 32 bit OS or 64 bit OS
- CPU: CPU Speed 1.8 GHz, L2 Cache Speed: 1.83 GHz, L2 Cache Size: 2MB
- Memory: 1 GB minimum
- Software requirements:
 - Microsoft SQL server 2005 or Microsoft SQL server 2008

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- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:

- UPS
- Backup station
- RAID system

Additional requirements

- Operating system for netloan client: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Operating system for netloan print: Windows XP Professional, Windows Vista Business, Windows 2003 server, 32 bit OS only
 - Requirements for XP – Service Pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Requirements for Windows 2000 server – Service pack 4, Update rollup 1, 500 Mhz Pentium processor or faster, 256 MB of RAM
 - Requirements for Windows 2003 server – Service pack 2, 750 Mhz Pentium processor or faster, 512 MB of RAM
 - Note: If you are operating a print server system where multiple computers print to a single computer we do not recommend using XP or Vista for this computer
- Operating system for netloan kiosk: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Staff administration PCs: A compatible web browser (one of Internet Explorer 6.0 or higher, Opera version 9.6 or higher, Mozilla Firefox version 3.07 or higher, Safari version 3 or higher or Chrome 1.0 or higher). Optimal resolution 1024x768.

Band B: 101 - 200 clients

Single server

- Operating system: Windows 2000 server, Window 2003 server , 32 bit OS only
- CPU: CPU Speed 2.0 GHz, L2 Cache Speed: 2.0 GHz, L2 Cache Size: 2MB
- Memory: 2 GB minimum
- Software requirements:
 - IIS version 5 or higher
 - .NET Framework 3.5
 - Microsoft SQL server 2005 or Microsoft SQL server 2008
- Recommended software:
 - Anti-virus software, with an exemption for real-time scanning of the netloan installation directory and web pages

Please note: none of these are supplied by lorensbergs Ltd

- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:
 - UPS
 - Backup station
 - RAID system

Additional requirements

- Operating system for netloan client: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Operating system for netloan print: Windows XP Professional, Windows Vista Business, Windows 2003 server, 32 bit OS only
 - Requirements for XP – Service Pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)

- Requirements for Windows 2000 server – Service pack 4, Update rollup 1, 500 Mhz Pentium processor or faster, 256 MB of RAM
- Requirements for Windows 2003 server – Service pack 2, 750 Mhz Pentium processor or faster, 512 MB of RAM
- Note: If you are operating a print server system where multiple computers print to a single computer we do not recommend using XP or Vista for this computer
- Operating system for netloan kiosk: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Staff administration PCs: A compatible web browser (one of Internet Explorer 6.0 or higher, Opera version 9.6 or higher, Mozilla Firefox version 3.07 or higher, Safari version 3 or higher or Chrome 1.0 or higher). Optimal resolution 1024x768.

Separate servers

Application server

- Operating system: Windows 2000 server, Window 2003 server , 32 bit OS only
- CPU: CPU Speed 2.0 GHz, L2 Cache Speed: 2.0 GHz, L2 Cache Size: 2MB
- Memory: 2 GB minimum
- Software requirements:
 - IIS version 5 or higher
 - .NET Framework 3.5
- Recommended software:
 - Anti-virus software, with an exemption for real-time scanning of the netloan installation directory and web pages

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- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:
 - UPS
 - Backup station
 - RAID system

Database server

- Operating system: Windows 2000, 2003 or 2008 server, 32 bit OS or 64 bit OS
- CPU: CPU Speed 2.0 GHz, L2 Cache Speed: 2.0 GHz, L2 Cache Size: 2MB
- Memory: 2 GB minimum
- Software requirements:
 - Microsoft SQL server 2005 or Microsoft SQL server 2008

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- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:

- UPS
- Backup station
- RAID system

Additional requirements

- Operating system for netloan client: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Operating system for netloan print: Windows XP Professional, Windows Vista Business, Windows 2003 server, 32 bit OS only
 - Requirements for XP – Service Pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Requirements for Windows 2000 server – Service pack 4, Update rollup 1, 500 Mhz Pentium processor or faster, 256 MB of RAM
 - Requirements for Windows 2003 server – Service pack 2, 750 Mhz Pentium processor or faster, 512 MB of RAM
 - Note: If you are operating a print server system where multiple computers print to a single computer we do not recommend using XP or Vista for this computer
- Operating system for netloan kiosk: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Staff administration PCs: A compatible web browser (one of Internet Explorer 6.0 or higher, Opera version 9.6 or higher, Mozilla Firefox version 3.07 or higher, Safari version 3 or higher or Chrome 1.0 or higher). Optimal resolution 1024x768.

Band C: 201 - 400 clients

Single server

- Operating system: Windows 2000 server, Window 2003 server , 32 bit OS only
- CPU: CPU Speed 2.6 GHz, L2 Cache Speed: 2.6 GHz, L2 Cache Size: 4MB
- Memory: 2 GB minimum (recommended 4 GB)
- Software requirements:
 - IIS version 5 or higher
 - .NET Framework 3.5
 - Microsoft SQL server 2005 or Microsoft SQL server 2008
- Recommended software:
 - Anti-virus software, with an exemption for real-time scanning of the netloan installation directory and web pages

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- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:
 - UPS
 - Backup station
 - RAID system

Additional requirements

- Operating system for netloan client: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Operating system for netloan print: Windows XP Professional, Windows Vista Business, Windows 2003 server, 32 bit OS only
 - Requirements for XP – Service Pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008

- redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- o Requirements for Windows 2000 server – Service pack 4, Update rollup 1, 500 Mhz Pentium processor or faster, 256 MB of RAM
- o Requirements for Windows 2003 server – Service pack 2, 750 Mhz Pentium processor or faster, 512 MB of RAM
- o Note: If you are operating a print server system where multiple computers print to a single computer we do not recommend using XP or Vista for this computer
- Operating system for netloan kiosk: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - o Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - o Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Staff administration PCs: A compatible web browser (one of Internet Explorer 6.0 or higher, Opera version 9.6 or higher, Mozilla Firefox version 3.07 or higher, Safari version 3 or higher or Chrome 1.0 or higher). Optimal resolution 1024x768.

Separate servers

Application server

- Operating system: Windows 2000 server, Window 2003 server , 32 bit OS only
- CPU: CPU Speed 2.6 GHz, L2 Cache Speed: 2.6 GHz, L2 Cache Size: 4MB
- Memory: 2 GB minimum
- Software requirements:
 - IIS version 5 or higher
 - .NET Framework 3.5
- Recommended software:
 - Anti-virus software, with an exemption for real-time scanning of the netloan installation directory and web pages

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- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:
 - UPS
 - Backup station
 - RAID system

Database server

- Operating system: Windows 2000, 2003 or 2008, 32 bit OS or 64 bit OS
- CPU: CPU Speed 2.6 GHz, L2 Cache Speed: 2.6 GHz, L2 Cache Size: 4MB
- Memory: 2 GB minimum
- Software requirements:
 - Microsoft SQL server 2005 or Microsoft SQL server 2008

Please note: none of these are supplied by lorensbergs Ltd

- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:

- UPS
- Backup station
- RAID system

Additional requirements

- Operating system for netloan client: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
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 - Requirements for XP – Service Pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Requirements for Windows 2000 server – Service pack 4, Update rollup 1, 500 Mhz Pentium processor or faster, 256 MB of RAM
 - Requirements for Windows 2003 server – Service pack 2, 750 Mhz Pentium processor or faster, 512 MB of RAM
 - Note: If you are operating a print server system where multiple computers print to a single computer we do not recommend using XP or Vista for this computer
- Operating system for netloan kiosk: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Staff administration PCs: A compatible web browser (one of Internet Explorer 6.0 or higher, Opera version 9.6 or higher, Mozilla Firefox version 3.07 or higher, Safari version 3 or higher or Chrome 1.0 or higher). Optimal resolution 1024x768.

Band D: 401 - 600 clients

Single server

- Operating system: Windows 2000 server, Window 2003 server , 32 bit OS only
- CPU: Twin processors, Dual core, CPU Speed 2.0 GHz, L2 Cache Speed: 2.0 GHz, L2 Cache Size: 4MB
- Memory: 4 GB minimum
- Software requirements:
 - IIS version 5 or higher
 - .NET Framework 3.5
 - Microsoft SQL server 2005 or Microsoft SQL server 2008
- Recommended software:
 - Anti-virus software, with an exemption for real-time scanning of the netloan installation directory and web pages

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- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:
 - UPS
 - Backup station
 - RAID system

Additional requirements

- Operating system for netloan client: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
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 - Requirements for XP – Service Pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
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- Staff administration PCs: A compatible web browser (one of Internet Explorer 6.0 or higher, Opera version 9.6 or higher, Mozilla Firefox version 3.07 or higher, Safari version 3 or higher or Chrome 1.0 or higher). Optimal resolution 1024x768.

Separate servers

Application server

- Operating system: Windows 2000 server, Window 2003 server , 32 bit OS only
- CPU: Dual core, CPU Speed 2.6 GHz, L2 Cache Speed: 2.6 GHz, L2 Cache Size: 4MB
- Memory: 4 GB minimum
- Software requirements:
 - IIS version 5 or higher
 - .NET Framework 3.5
- Recommended software:
 - Anti-virus software, with an exemption for real-time scanning of the netloan installation directory and web pages

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- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:
 - UPS
 - Backup station
 - RAID system

Database server

- Operating system: Windows 2000, 2003 or 2008, 32 bit OS or 64 bit OS
- CPU: CPU Speed 2.6 GHz, L2 Cache Speed: 2.6 GHz, L2 Cache Size: 4MB
- Memory: 4 GB minimum
- Software requirements:
 - Microsoft SQL server 2005 or Microsoft SQL server 2008

Please note: none of these are supplied by lorensbergs Ltd

- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:

- UPS
- Backup station
- RAID system

Additional requirements

- Operating system for netloan client: Windows XP Professional, Windows Vista Business, 32 bit OS only
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 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Staff administration PCs: A compatible web browser (one of Internet Explorer 6.0 or higher, Opera version 9.6 or higher, Mozilla Firefox version 3.07 or higher, Safari version 3 or higher or Chrome 1.0 or higher). Optimal resolution 1024x768.

Band E: 601 or more clients

Single server

- Operating system: Windows 2000 server, Window 2003 server , 32 bit OS only
- CPU: Twin processors, Dual core, CPU Speed 2.6 GHz, L2 Cache Speed: 2.6 GHz, L2 Cache Size: 4MB
- Memory: 4 GB minimum
- Software requirements:
 - IIS version 5 or higher
 - .NET Framework 3.5
 - Microsoft SQL server 2005 or Microsoft SQL server 2008
- Recommended software:
 - Anti-virus software, with an exemption for real-time scanning of the netloan installation directory and web pages

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 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
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 - UPS
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 - RAID system

Additional requirements

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 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Operating system for netloan print: Windows XP Professional, Windows Vista Business, Windows 2003 server, 32 bit OS only
 - Requirements for XP – Service Pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)

- Requirements for Windows 2000 server – Service pack 4, Update rollup 1, 500 Mhz Pentium processor or faster, 256 MB of RAM
- Requirements for Windows 2003 server – Service pack 2, 750 Mhz Pentium processor or faster, 512 MB of RAM
- Note: If you are operating a print server system where multiple computers print to a single computer we do not recommend using XP or Vista for this computer
- Operating system for netloan kiosk: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Staff administration PCs: A compatible web browser (one of Internet Explorer 6.0 or higher, Opera version 9.6 or higher, Mozilla Firefox version 3.07 or higher, Safari version 3 or higher or Chrome 1.0 or higher). Optimal resolution 1024x768.

Separate servers

Application server

- Operating system: Windows 2000 server, Window 2003 server , 32 bit OS only
- CPU: CPU Speed 1.8 GHz, L2 Cache Speed: 1.83 GHz, L2 Cache Size: 2MB
- Memory: 4 GB minimum
- Software requirements:
 - IIS version 5 or higher
 - .NET Framework 3.5
- Recommended software:
 - Anti-virus software, with an exemption for real-time scanning of the netloan installation directory and web pages

Please note: none of these are supplied by lorensbergs Ltd

- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:
 - UPS
 - Backup station
 - RAID system

Database server

- Operating system: Windows 2000, 2003 or 2008 server, 32 bit OS or 64 bit OS
- CPU: CPU Speed 1.8 GHz, L2 Cache Speed: 1.83 GHz, L2 Cache Size: 2MB
- Memory: 4 GB minimum
- Software requirements:
 - Microsoft SQL server 2005 or Microsoft SQL server 2008

Please note: none of these are supplied by lorensbergs Ltd

- Hardware requirements:
 - Network Ethernet card
 - Network requirements: TCP/IP using static or dynamic addressing. Private IP nets (10.0.0.0 or 192.168.0.0) are usable but then a router, firewall or proxy is needed in the connection to the internet. The use of network address translation between the netloan server and the netloan clients is not supported.
- Recommended hardware:

- UPS
- Backup station
- RAID system

Additional requirements

- Operating system for netloan client: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Operating system for netloan print: Windows XP Professional, Windows Vista Business, Windows 2003 server, 32 bit OS only
 - Requirements for XP – Service Pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Requirements for Windows 2000 server – Service pack 4, Update rollup 1, 500 Mhz Pentium processor or faster, 256 MB of RAM
 - Requirements for Windows 2003 server – Service pack 2, 750 Mhz Pentium processor or faster, 512 MB of RAM
 - Note: If you are operating a print server system where multiple computers print to a single computer we do not recommend using XP or Vista for this computer
- Operating system for netloan kiosk: Windows XP Professional, Windows Vista Business, 32 bit OS only
 - Requirements for XP – Service pack 3, 300 Mhz Pentium processor or faster, 128 MB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
 - Requirements for Vista – Service pack 1, 1 Ghz Pentium processor or faster, 2 GB of RAM, .NET Framework 3.5, Visual C++ 2008 redistributable package version 9.0.21022.8 (supplied by lorensbergs)
- Staff administration PCs: A compatible web browser (one of Internet Explorer 6.0 or higher, Opera version 9.6 or higher, Mozilla Firefox version 3.07 or higher, Safari version 3 or higher or Chrome 1.0 or higher). Optimal resolution 1024x768.

More than 1000 clients

If you are planning to have more than 1000 clients you should discuss your set up with a lorensbergs engineer before making a decision. Please give us a call on +44 (0)1992 415500 or email technical.support@lorensbergs.com.

Thin client deployments

Currently we support the use of Microsoft Terminal services or Citrix Presentation server 4.5 in a thin client deployment. If you are using a Citrix Presentation server then it must present a complete desktop for it to be supported.

Version 4.4 does not support the use remote desktop connections to clients at the current time.

For remote terminals lorensbergs recommends using Wyse terminals. We do not support the use of embedded Windows XP with remote terminals.

Virtualising netloan servers

Virtualised servers are supported with netloan 4.4 for use with the netloan server (either as a single server or combined application and database servers) and netloan print servers.

For existing customers who are migrating from a physical environment to a virtual environment you may need to change your licensing system from a hardware dongle to a software licensing scheme. If you use a hardware dongle and are thinking of virtualising your environment, please give us a call on +44 (0)1992 415500 or email technical.support@lorensbergs.com so we can make the appropriate arrangements for changing you to a software licence system.