



NS

Hardware Setup and Configuration

DOCUMENTATION FOR HARDWARE AND NETWORK
TECHNICIANS

UPDATED MAR 2017



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NS

Define your club deployment type

Large Clubs

# of POS & RPOS Terminals	Above 20
# of Back Office Work stations	Above 20
Total Member Roster	Above 5000

Medium Clubs

# of POS & RPOS Terminals	Below 20
# of Back Office Work stations	Below 20
Total Member Roster	Below 5000

Please contact Project Management in case you are not sure which category your club falls under.

Contact Information

Name	Title	Phone	Email
Fattah R. Zia	Manager Professional Services	(678)389-4279	fattah.rahmaan@globalnorthstar.com
Moses F. Joseph	Project Manager	(678)389-4300 x 149	moses.joseph@globalnorthstar.com
Salman Anwer	Project Manager	(678)389-4300 x 146	salman.anwer@globalnorthstar.com
Atif Baqar	Hardware Expert & Solution Architect.	678 389 4297	atif.baqar@globalnorthstar.com

Please also keep the following departmental emails for your records

Department	Email
NSConnect Support(website)	connect@globalnorthstar.com
Northstar Implementation Support (Application)	pm@globalnorthstar.com
Northstar Support (Application)	Support@globalnorthstar.com

Northstar Server

Hardware and OS Requirements

Below are the standard minimum specifications for each server in use by the Northstar application. For clubs that will be separating the application and database server, requirements would remain the same as stated below for each server that the club wishes to use.

Medium Clubs	Large Clubs
<p>CPU Intel Xeon Dual Core or above. X64 bit CPU</p>	<p>CPU Intel Xeon Dual Core or above. X64 bit CPU</p>
<p>RAM 16 GB *Please add 8 more GBs of RAM if using Northstar Connect as well.</p>	<p>RAM 48 to 64 GB</p>
<p>Hard Drive 250 GB or larger</p>	<p>Hard Drive 350 GB or larger</p>
<p>Operating System Windows Server 2008 R2 Standard/ Windows Server 2012 R2 Essentials Windows Server 2012 Foundation (Virtualization is not supported by Foundation Server)</p>	<p>Operating System Windows Server 2008 R2 Enterprise/ Windows Server 2012 R Enterprise</p>

Additional Hardware Requirements

1. RAID/Mirroring Enabled.
2. RAID 5 with 3 drives recommended to maximize uptime.
3. We require a partitioned drive as follows:
 - a. Operating System Drive: Min. 80GB
 - b. *Northstar Drive: Rest assigned to Northstar e.g. 170GB or 270 GB
4. Please set swap file size to 20% on the Northstar Drive.

*This specification may vary considering the usage of the product, for example if you are using Northstar Connect and have a large amount of images and media then please keep 500GB to a 1 TB for the Northstar Drive.

Software Requirements

1. Northstar requires a dedicated server, with no other application software operating, including Microsoft Exchange, Microsoft SQL Server and/or any previous accounting systems. Northstar will not install on servers when non-supported software is running.
2. Operating System: Windows Server 2003, 2008, 2008 R2 & 2012 R2 (Standard or Enterprise 64 bit).
3. Internet Explorer: 9.0 or 11.0, we do not support IE -10.
4. Adobe PDF Reader: 10.1.11 or higher.
5. Microsoft Office: Latest edition. If cost is an issue, only MS Excel and MS Word are required.
6. Automatic Windows update are required to be disabled, these updates should only be loaded in a supervised manner.

7. If you are planning to use the Northstar Campaigns module or any other emailing interface with the application, please discuss your email requirements with your Implementation Specialist / Project Manager / Account Manager for details & price structure.

Communications Software and Access

1. Northstar will install LogMeln during its installation process for remote access.
2. Northstar requires Administrative rights to the server (not to the domain). We can accept a new user with Administrative rights or the Administrator account itself. Only this account should be used to add shared or network printers on Northstar Application Server.
3. RDP Connections to the Northstar Server should only be allowed through a specific port. This allows for a confined way of accessing the server, if and when required.

Network Configuration

1. The server should have both an internal and an external static IP. Northstar must be able to access the server remotely through its static IP. Internet connection used must be a dedicated business standard i.e. T1 connection.
2. For bandwidth requirements, please use the following number as a basic guide; but for confirmed requirements always consult with your Implementation Specialist:
Medium Size Clubs: Minimum Bandwidth 3MB Down and 2MB Upload.
Large Size Clubs: Minimum Bandwidth 15MB Down and 2 MB Upload.
3. The following router ports should be open and forwarded to the Northstar server:
Application: 8080
Website (Http): 80
Website (Https): 443
4. Northstar Server should be on a domain (For medium size clubs Northstar Server can be a Primary Domain Controller if running Windows Server 2008 or later). Active Directory is supported.
5. Please enable Reverse DNS for the domain and server so that email Campaign.
6. NAT Loopback/NAT Reflection to be enable on the main router.
7. SSL Certificate is required to be purchased and deployed prior to go-live to ensure that the application & website goes online with a secured platform.
8. Please create a subdomain for example [http://application.\[clubname\].com](http://application.[clubname].com) and sign up with <https://www.godaddy.com/ssl/ssl-certificates.aspx?ci=9039>.

Tape Backup and Anti-Virus Software

1. Please INCLUDE the following Northstar folders in your daily tape, CD or other backup mechanism:
 - \NS_DB_Backups
 - \Northstar\Tools
 - \Northstar\Updates
 - \NSDocuments
 - \Northstar\Data (For NS Connect installations)
2. Please EXCLUDE the following Northstar folders from tape backup and anti-virus scans:
 - \Northstar\Tomcat
 - \MySQL

Please note that Northstar is not responsible for backing up club's database. Northstar only creates a backup job which exports the data every night after midnight into the NS_DB_Backups folder. Northstar Technologies Inc. also provide database real time replication Setup service at additional one-time cost for customers who are interested in keeping the real time data on another machine. Northstar does not monitor a backup job, it is clubs responsibility to discuss the backups with IT.

POS Terminals and Back Office Workstations

Hardware Requirements

1. CPU: Celeron D or faster. AMD processors are supported.
2. RAM Memory: 2GB and above
3. Hard disk drive: 40GB or larger. No Northstar data is stored on the HDD. The system is completely browser based.
4. Touchscreen should be 15" or larger (17" is recommended) with 1024 x 768 screen resolution.
Not required for Back Office Workstations.
5. USB or Serial connection for the touch screen is supported. **Not required for Back Office Workstations**
6. Touchscreen must be resistive technology, not capacitive. **Not required for Back Office Workstations**
7. The following handheld devices are supported by Northstar as long as the above specified CPU requirements are fulfilled:
 - Apple iPad 2 (iOS 7) – Credit Card supported with ETS Card Readers ONLY.
 - Apple iPad Air (iOS 7)
 - Windows Surface (as long as the IE version supported on the tablet is either IE 9.0 or IE 11.0). Surface tablets only offering IE Edge are NOT supported with Northstar.
 - Sahara Netslate a525 Tablet PC (<http://www.tabletkiosk.com>)
 - EO a7400 Tablet PC (<http://www.tabletkiosk.com>)

Shift4 is not supported with Handheld devices.

Software Requirements

1. Operating System: Windows Vista, Windows 7, Windows 8, Windows 8.1 & Windows 10. Any Home Editions are not supported since they cannot join Domain.
2. Internet Explorer: 9.0 or 11.0 IE 10.0 is not supported.
3. Adobe PDF Reader: 10.1.11 or higher. **Not required for POS Terminals.**
4. Microsoft Office: Latest edition. If cost is an issue, only MS Excel and MS Word are required. This is necessary for running Northstar reports. **Not required for POS Terminals.**
5. Windows Update should be disabled and should only be loaded in a supervised manner.
6. Please make sure that POS Terminals have .Net Framework 3.5 installed on them.

Network Configuration

1. POS Terminals and Back Office Workstations must have static IP addresses on the network.
2. All workstations should be appropriately named: Dining Room-Left, Grille, GolfShop, etc.
3. All workstations must be on the same domain as the Northstar server.
4. Internet access is required during initial installation so that network company can download Sun Java, however after setup has been done, internet access is not necessary.
5. The IP address of Northstar server should be added as a trusted site or local intranet on the workstation and pop-ups should be allowed from NS Server IP address.
6. POS terminal and NS Application Short cuts should be pushed to Desktop of each terminal and workstation by club's IT.

POS Peripherals

1. Receipt printers should be Epson thermal TM-T88 (latest) or any thermal printer that supports the Epson ESC/POS command set (Samsung SRP350 is a good alternative).
2. Receipt printers can be connected via parallel, Serial, Bluetooth or USB to the workstation. TCP IP/Ethernet based printers are recommended for receipt printing.
3. The printer should be configured on the workstation using the Generic/Text only printer driver. If the printer is connected via USB to the workstation, you will be required to use the default printer driver.
4. The receipt printer should be shared and added to the server using the local port to the Northstar Server in case Ethernet receipt printers are not installed. The printer has been correctly configured when a Windows test print can be sent from Northstar server. At least one club staff needs to be trained by IT Company on how to test printers.
5. Receipt printers should be appropriately named: R-Dining Room-Left, R-GolfShop.
6. Cash drawers should be connected directly to the Epson (or compatible) printers using an RJ-12 6 PIN MMF connector. USB, Serial, and other types of cash drawers are not supported. Any cash drawer brand that is compatible with the Epson TM-T88 (latest) will work with Northstar.
7. Barcode scanners should be connected to the workstation via USB. Suggested model: Metrologic Voyager, trigger less with stand.
8. Datalogic Quick Scan QBT2430 (Bluetooth will also work with IOS 8.1) is supported with Retail Point of Sale running on iPad as well.
9. Magnetic card reader for Northstar gift card swipes should be connected to the workstation via USB in HID mode (emulates keyboard). The reader should read tracks 1 and 2. Suggested model: MagTek Wedge or Mini Wedge.
10. For Credit Cards readers and Supported Merchants please see detailed section for Credit Card Processing.
11. Physical inventory scanner can be Datalogic Falcon X3 / Scorpio X3 connected via USB to a cradle and then to workstation. Please buy 52 key inventory guns for easy to use keyboard. Supported OS are Microsoft Windows® CE 6.0 and Windows Mobile® 5.0.
12. In case club wants to buy a less expensive, basic inventory gun, we also work with Metrologic SP-5500 and SP-5600
13. BOCA Ticket Printers are required for printing tickets with the Northstar Application. You can find more information on these printers using the following link:
<http://www.bocasystems.com/receiptprinters.html>

Back Office Peripherals

1. Report printers can be any Windows supported printer and be directly connected to the workstation or shared from the server. For printing barcode labels a laser is preferred (instead of an inkjet).
2. For Membership Cards, suggested model is Zebra ZXP Series 3 and Series 7 Card Printer. View the Model information on this link:
<http://www.zebra.com/us/en/products-services/printers/printer-type/card/zxp-series-3.html>
<https://www.zebra.com/us/en/products-services/printers/printer-type/card/zxp-series-7.html>
3. Another suggested model for Membership cards is Datacard CD800 Card Printer. View the Model information on this link:
<http://www.datacard.com/id-card-printers/cd800-id-card-printer>
4. For Inventory Bar Code labels, suggested model is Zebra Printer Model is LP2824 with Ethernet interface. View the Model information on this link:
<http://www.zebra.com/us/en/products-services/printers/printer-type/desktop/2824-plus-series.html>

Club Now App Peripherals

1. Motorola DS9208 is required to scan QRCode or Barcode for Membership Cards via the mobile app. For more information, please visit the following link:

<https://www.zebra.com/us/en/support-downloads/scanners/general-purpose-scanners/ds9208.html>

Credit Card Processing

Credit Card Readers and Swipers

Please use the below reference table for details regarding where to purchase Credit Card Readers and/or Swipers:

Credit Card Processor	Details
ETS	Ask ETS to send Encrypted Credit Card readers for NS POS
ETS - iPad	Ask ETS to send Bluetooth Credit card readers
Shift 4	Ask Shift 4 to send Credit Card readers for NS POS
PayPros	Ask PayPros to send Credit Card readers for NS

Merchant Availability By Module

Please view the below matrix for understanding which Merchants are available for each module in Northstar. Currently **ETS** and **OpenEdge** have the most compatibility:

Module	ETS	Shift4	OpenEdge
AR	X	X	X
Banquets	X		X
Events	X		X
F&B POS	X	X	X
Retail POS	X	X	X
Rooms	X	<i>In Development</i>	
Marina	X		
POA	X		X
NS Connect	X		X
EMV	<i>In Development</i>		X
ACH	X		X

Credit Card Processor or Merchant Contact Information

ETS - Electronic Transaction Systems

Business Development - Lowie Thomas

Phone: (800) 834-7790 x204

Fax: (703) 421-915

Email: LThomas@emoney.com

OpenEdge

Merchant Sales - Charlie Lautenbach

Phone: (919) 335-0109

Fax: (877) 893-0216

Email: charlie.lautenbach@openedgepay.com

PayPros

Bill Reynolds

Phone: (616) 940-1082

Toll Free: (888) 360-1082

Email: bill@revbusiness.com

Kitchen Printers

Hardware Requirements

1. Kitchen Printers must be Epson U220B or U220D Ethernet printer, with auto cutter.
2. Alternative printer is Samsung SRP270C with Ethernet interface and auto cutter.

Network Configuration

1. Kitchen Printers must have static IP addresses.
 2. Kitchen printers must be installed on the server using Generic/Text only printer drivers.
 3. Preparation printers should be appropriately named: Hot-Upper, Cold-upper, Expo-upper, Bar-Main, etc.
 4. The printer installation is complete when Windows test print can be sent from Northstar Server. IT Company has to train at least one club staff in testing those printers.
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Hardware Configuration Summary

Summary Requirements

Hardware technicians are requested to complete this summary worksheet and send it via fax to Northstar Technologies at 760-454-7470. Questions should be directed to the Northstar Implementation specialist assigned to the Club or Northstar Support at 678-389-4300 x1.

Club Name	
Technician Name	
Technician Company	
Technician Phone #	
Technician E-Mail	
Date	

Please list the internal IP addresses of the server, all workstations, and network printers. Identify each device by IP and network name:

Device Name-Type	IP

Please list the external, static IP address of the server:

Please provide an Administrator login id and password:

Please list the brand, model, and configuration of the server:

Please list the brand, model, and configuration of the POS stations:

Please list the brand, model, and configuration of the receipt printers:

Please list the brand, model, and configuration of the preparation printers:

Please identify the type of cabling used:

Any other hardware or configuration we should know about?

To be filled by Club IT or Technician:

Technician Signature

Name

Contact #

Email Address:

