

Session #105 - Networking Best Practices - Andrew Abrams



2007 • SLEETER GROUP
ACCOUNTING SOFTWARE
CONSULTING CONFERENCE

OCTOBER 23-26, 2007 • LAS VEGAS, NEVADA
Call 888-484-5484 or visit
www.sleeter.com



FOR ACCOUNTANTS, BOOKKEEPERS QUICKBOOKS® & ACCOUNTING SOFTWARE CONSULTANTS

Networking Best Practices LANs, WANs, Servers, and VPNs

Andrew B. Abrams
Founder / CEO
Technology In A Box, LLC
www.technologyinabox.net
abrams@technologyinabox.net



**TECHNOLOGY
IN A BOX**

Solutions Powered by QuickBooks®

Microsoft Certified Small Business Specialist
Microsoft Certified Professional
Certified QuickBooks Advanced ProAdvisor
Certified QuickBooks Enterprise ProAdvisor
Certified QuickBooks Point of Sale ProAdvisor
QuickBooks Enterprise Solution Provider
QuickBooks Point of Sale Retail Solution Provider





2007 • SLEETER GROUP
ACCOUNTING SOFTWARE
CONSULTING CONFERENCE

OCTOBER 23-26, 2007 • LAS VEGAS, NEVADA
Call 888-484-5484 or visit
www.sleeter.com




FOR ACCOUNTANTS, BOOKKEEPERS QUICKBOOKS® & ACCOUNTING SOFTWARE CONSULTANTS

Windows Server Versions

- **Windows 2003 Server**
 - File/Print server, **QuickBooks Host**
 - Active Directory, DNS, DHCP, WINS server
 - Web server
- **Windows 2003 Small Business Server (SBS)**
 - Active Directory, DNS, DHCP, WINS, File/Print, **QB Host**
 - Exchange Server (Outlook Web Access), SharePoint/Companyweb/Fax Server, SQL Server, Remote Web Workplace
 - ISA 2004 Server (Premium Edition)
- **Windows 2003 Server – Terminal Server**
 - Application Sharing Mode – Host Desktop Sessions
 - Typically not running AD, Exchange
 - Terminal Server Licenses Required, **QB Host/Client**


© 2007 The Sleeter Group All Rights Reserved

Session #105 - Networking Best Practices - Andrew Abrams



2007 • SLEETER GROUP
ACCOUNTING SOFTWARE
CONSULTING CONFERENCE

OCTOBER 23-26, 2007 • LAS VEGAS, NEVADA
Call 888-484-5484 or visit
www.sleeter.com




FOR ACCOUNTANTS, BOOKKEEPERS QUICKBOOKS® & ACCOUNTING SOFTWARE CONSULTANTS

Windows Server 2003 Standard


- **Pros**
 - File/Print server, **QuickBooks Host**
 - Active Directory, DNS, DHCP, WINS server
 - Web server
 - Single repository for data shares and folders
 - Manage all user accounts and security groups at a single point with top down control
 - Assign different users to different security groups to different data shares/folders through a single interface
- **Cons**
 - Requires an IT professional/expertise to install and configure
 - Server hardware and software licenses cost more than a Windows XP Pro workstation
 - Requires monthly updates and management by trained person

© 2007 The Sleeter Group All Rights Reserved



2007 • SLEETER GROUP
ACCOUNTING SOFTWARE
CONSULTING CONFERENCE

OCTOBER 23-26, 2007 • LAS VEGAS, NEVADA
Call 888-484-5484 or visit
www.sleeter.com




FOR ACCOUNTANTS, BOOKKEEPERS QUICKBOOKS® & ACCOUNTING SOFTWARE CONSULTANTS

Windows 2003 SBS

- **Pros**
 - Microsoft's main software packages, all in one solution
 - Comes with Windows Server 2003, Exchange Server 2003, SharePoint Server, Fax Server, ISA 2004 and SQL Server (Premium Edition)
 - Remote Web Workplace, Outlook Web Access, Outlook Mobile Access, Microsoft software VPN
- **Cons**
 - Requires an IT professional/expertise to install and configure
 - Server hardware and software licenses cost more than a Windows 2003 Standard server
 - Requires monthly updates and management by trained person
 - Requires training of employees on how to use remote resources


© 2007 The Sleeter Group All Rights Reserved

Session #105 - Networking Best Practices - Andrew Abrams



2007 • SLEETER GROUP
ACCOUNTING SOFTWARE
CONSULTING CONFERENCE

OCTOBER 23-26, 2007 • LAS VEGAS, NEVADA
Call 888-484-5484 or visit
www.sleeter.com




FOR ACCOUNTANTS, BOOKKEEPERS QUICKBOOKS® & ACCOUNTING SOFTWARE CONSULTANTS

Windows 2003 Terminal Server


- **Pros**
 - Pre-build server with single install of Windows, Office and QB; ship and plug in
 - “Glorified Workstation” which hosts multiple desktop sessions
 - No need to upgrade existing workstations or add new workstations
 - Can remote into from LAN, Home, Remote Locations and work in same user profile
 - Multiple users in multiple desktops running multiple applications opening multiple files
- **Cons**
 - Requires MS Volume Licenses for Terminal Server and Office, in addition to Windows
 - Need more robust server platform to handle multiple desktop sessions (Dual Quad Core Processor, 4+ GB RAM, RAID Arrays)

© 2007 The Sleeter Group All Rights Reserved



2007 • SLEETER GROUP
ACCOUNTING SOFTWARE
CONSULTING CONFERENCE

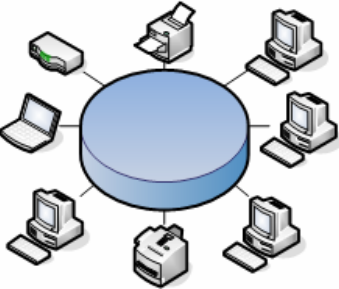
OCTOBER 23-26, 2007 • LAS VEGAS, NEVADA
Call 888-484-5484 or visit
www.sleeter.com



FOR ACCOUNTANTS, BOOKKEEPERS QUICKBOOKS® & ACCOUNTING SOFTWARE CONSULTANTS


Peer-to-Peer Network

- All devices are setup and configured independently of one another
- The Cable/DSL Router Firewall is the Internet Gateway
- In order to communicate, all computers must be a member of the same Workgroup with the same Users configured on each computer
- Each User account must have same password on each computer
- There may not be a central “File Share”, each computer could share files




© 2007 The Sleeter Group All Rights Reserved

Session #105 - Networking Best Practices - Andrew Abrams



2007 • SLEETER GROUP
**ACCOUNTING SOFTWARE
CONSULTING CONFERENCE**

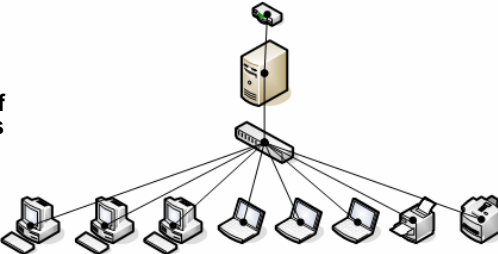
OCTOBER 23-26, 2007 • LAS VEGAS, NEVADA
Call 888-484-5484 or visit
www.sleeter.com




FOR ACCOUNTANTS, BOOKKEEPERS QUICKBOOKS® & ACCOUNTING SOFTWARE CONSULTANTS

Client-Server

- Server manages network and all computers and devices
- Server is the Internet Gateway or directs traffic through the Cable/DSL Router Firewall
In order to communicate, all computers must be a member of the same Domain with the Users configured on the Server
- The Server manages the security allowing the user to login to any computer with their credentials
- The Server is the central “File Share”, each computer shouldn’t share files




© 2007 The Sleeter Group All Rights Reserved



2007 • SLEETER GROUP
**ACCOUNTING SOFTWARE
CONSULTING CONFERENCE**

OCTOBER 23-26, 2007 • LAS VEGAS, NEVADA
Call 888-484-5484 or visit
www.sleeter.com




FOR ACCOUNTANTS, BOOKKEEPERS QUICKBOOKS® & ACCOUNTING SOFTWARE CONSULTANTS

Virtual Private Network (VPN)

- **Methods of establishing VPNs**
 - Router to Router VPN
 - Software Client to Router VPN
 - Software Client to Server VPN
 - Software Client to Gateway to Software Client VPN


© 2007 The Sleeter Group All Rights Reserved

Session #105 - Networking Best Practices - Andrew Abrams



2007 • SLEETER GROUP
ACCOUNTING SOFTWARE
CONSULTING CONFERENCE

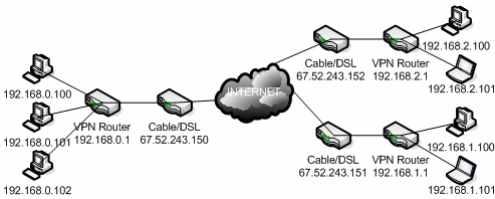
OCTOBER 23-26, 2007 • LAS VEGAS, NEVADA
Call 888-484-5484 or visit
www.sleeter.com




FOR ACCOUNTANTS, BOOKKEEPERS QUICKBOOKS® & ACCOUNTING SOFTWARE CONSULTANTS

Router to Router VPN

- Requires 2 or more VPN Router/Firewalls
- Requires the Internet connection at each location to have a Static IP address and at least 364 K speed
- Requires a technician to install equipment, configure VPN Router/Firewall for Internet access and configure at least One or more VPN tunnels
- The VPN Routers then communicate with each other and pass traffic across the separate LANs




© 2007 The Sleeter Group All Rights Reserved



2007 • SLEETER GROUP
ACCOUNTING SOFTWARE
CONSULTING CONFERENCE

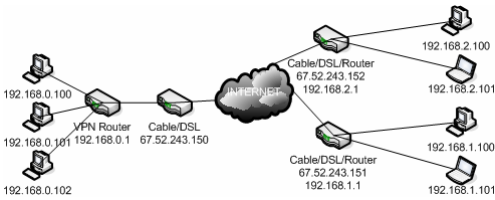
OCTOBER 23-26, 2007 • LAS VEGAS, NEVADA
Call 888-484-5484 or visit
www.sleeter.com



FOR ACCOUNTANTS, BOOKKEEPERS QUICKBOOKS® & ACCOUNTING SOFTWARE CONSULTANTS


Software Client to Router VPN

- Requires 1 or more VPN Router/Firewalls
- Requires the Internet connection at the main location to have a Static IP address and at least 364 K speed
- Requires a technician to install equipment, configure VPN Router/Firewall for Internet access
- Requires technician to configure software and router for VPN tunnel
- The VPN routers then communicate with each software client and they pass traffic across the separate LANs




© 2007 The Sleeter Group All Rights Reserved

Session #105 - Networking Best Practices - Andrew Abrams



2007 • SLEETER GROUP
ACCOUNTING SOFTWARE
CONSULTING CONFERENCE

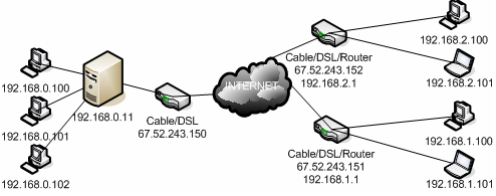
OCTOBER 23-26, 2007 • LAS VEGAS, NEVADA
Call 888-484-5484 or visit
www.sleeter.com




FOR ACCOUNTANTS, BOOKKEEPERS QUICKBOOKS® & ACCOUNTING SOFTWARE CONSULTANTS

Software Client to Server VPN

- Requires server acting as VPN Router and Firewall
- Requires the Internet connection at the main location to have a Static IP address and at least 364 K speed
- Requires a technician to install server, equipment, configure Server for Internet access and configure VPN access policies
- Requires technician to configure software and Server for VPN tunnel
- The Server then communicate with each software client and they pass traffic across the separate LANs




© 2007 The Sleeter Group All Rights Reserved



2007 • SLEETER GROUP
ACCOUNTING SOFTWARE
CONSULTING CONFERENCE

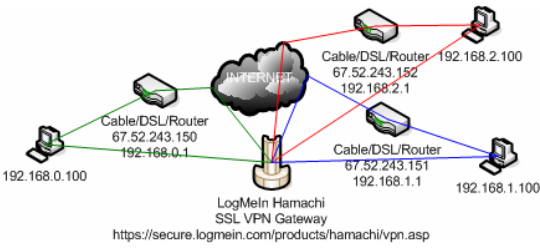
OCTOBER 23-26, 2007 • LAS VEGAS, NEVADA
Call 888-484-5484 or visit
www.sleeter.com



FOR ACCOUNTANTS, BOOKKEEPERS QUICKBOOKS® & ACCOUNTING SOFTWARE CONSULTANTS

Software Client to Gateway to Software Client VPN

- Doesn't require any VPN routers.
- Doesn't require either location to have a Static IP but should at least have 364 K speed at each location
- Doesn't require technician or advanced knowledge to setup and configure, just follow manufacturer guidelines
- The workstations then connect to the gateway, the gateway joins the computer together, the computers that talk directly to each other as if they were next to one another.



© 2007 The Sleeter Group All Rights Reserved

Session #105 - Networking Best Practices - Andrew Abrams

2007 • SLEETER GROUP
ACCOUNTING SOFTWARE CONSULTING CONFERENCE

OCTOBER 23-26, 2007 • LAS VEGAS, NEVADA
Call 888-484-5484 or visit www.sleeter.com

FOR ACCOUNTANTS, BOOKKEEPERS QUICKBOOKS® & ACCOUNTING SOFTWARE CONSULTANTS

THE SLEETER GROUP
CERTIFIED QuickBooks CONSULTANT

THE SLEETER GROUP
Consultants NETWORK

CERTIFIED QuickBooks Point of Sale ProAdvisor

Questions
Andrew B. Abrams
www.technologyinabox.net
abrams@technologyinabox.net

CERTIFIED QuickBooks ProAdvisor

TECHNOLOGY IN A BOX
Solutions Powered by QuickBooks®



© 2007 The Sleeter Group All Rights Reserved