

RescueNet Code Review

Diagnostic Data Server requirements

Document updated: March 11, 2004

- Diagnostic Data Server - server requirements 1
 - Operating system 1
 - Connectivity 1
 - Software 1
- Diagnostic Data Server - client requirements 2
 - Windows-based computer 2
 - Pocket PC 2
- Diagnostic Data Server - connectivity options 3
 - Direct Internet connection (recommended) 3
 - Circuit-switched dial-up connection 3
- Recommendation 4



Diagnostic Data Server - server requirements

- Pentium II microprocessor or higher
- 256 MB RAM
- 100 MB free hard disk space

Operating system

Microsoft Windows 2000 or XP Professional (recommended)

Connectivity

Routable TCP/IP connectivity between remote computer and Diagnostic Server. Two connection methods are supported.

Internet

- Diagnostic Server must have a static IP address visible to the Internet.
- A single configurable port at this IP address is used and must be allowed through your firewall.

Circuit-switched dialup

- Customer provides Remote Access Service (RAS) infrastructure and one or more phone lines.
- Diagnostic Server must be routable when connected to RAS server.

Software

- RescueNet Code Review Standard or Advanced Editions
- Leadtools ePrint 3.0 or later
- Symantec WinFax Pro 9.0 or later

Diagnostic Data Server - client requirements

The client can be a Windows-based computer or a Pocket PC.

Windows-based computer

- Pentium II microprocessor or higher
- 256 MB RAM
- 100 MB free hard disk space
- Microsoft Windows 2000 or XP Professional (recommended)
- Bluetooth or serial cable
- Routable TCP/IP connectivity with Diagnostic Server. This is typically accomplished with a cellular phone using GRPS, EDGE, or a similar TCP/IP based technology or by establishing a “dialup” connection. See *Connectivity Options* below.

Pocket PC

- Pocket PC device running Pocket PC 2002 or higher
- 32 MB RAM/32 MB ROM (Flash)
- Bluetooth or serial cable
- Routable TCP/IP connectivity with Diagnostic Server. This is typically accomplished with a cellular phone using GRPS, EDGE, or a similar TCP/IP based technology or by establishing a “dialup” connection. See *Connectivity Options* below.

Note: If you are using serial cable to transmit data from the M Series to the Pocket PC, you must connect the ZOLL cable (ZOLL part number 8000-0605-01) to a NULL modem cable, which must be connected to the appropriate cable for your Pocket PC. You might need serial adapters (gender changers) to connect the cables.

Tested Pocket PC devices

- Compaq iPAQ 3870
- Compaq iPAQ 3975
- Compaq iPAQ 1945
- HP iPAQ 2215
- T-Mobile Pocket PC Phone

For more information about Pocket PCs, visit www.PocketPCCentral.net.

Diagnostic Data Server - connectivity options

Whether you are using a Pocket PC, Tablet PC, or other Windows-based device as your remote computer, you will need to establish connectivity from this device to your Diagnostic Server. While any routable TCP/IP connection should work, there are two typical ways to create this connection: Direct Internet connection and Circuit-switched dial-up connection.

Direct Internet connection (recommended)

In this model, you use a digital cellular phone. The phone must have an Internet access plan, which allows it to be used to connect directly to the Internet. Because the connection is 100% digital, time to connection is nearly instantaneous; consequently, this method offers the fastest transmission times.

The phone provides a dial-up networking emulation, so the remote computer can use its built-in dial-up networking software protocols. You can work with your cellular provider to configure the phone and determine the appropriate *dialing string* that you will use to establish the Internet connection. You'll need the dialing string in order to configure dial-up networking on the remote computer so that when it is activated, the remote computer gains an Internet connection using the cellular phone as a gateway.

The advantages of this model are:

- Your connection setup time is typically very fast.
- Server-side infrastructure needs are reduced, for example, modems and phone lines and not needed.
- The connection is completed via an Internet connection to your location.
- As the phone lines are not used to connect to Diagnostic Server, you won't experience busy signals.

The one drawback to this model is that you must allow Internet traffic to reach your Diagnostic Server. This is typically accomplished using Network Address Translation (NAT) to allow only very specific Internet traffic to reach the Diagnostic Server. In fact, only a single port is utilized, which you select and configure. The default port is 80.

Circuit-switched dial-up connection

In this model, you use a cellular phone as a modem. The remote computer uses dial-up networking to dial an actual phone number, which is typically a remote access server (RAS) running on the same local area network as the Diagnostic Server.

Because the modems must negotiate the connection (the squealing you hear when dialing up to a network service), time to connection is typically longer.

In this model, the nature of the connection is partially analog, and is routed onto phone lines and modems that you must supply as part of the infrastructure. While busy signals are possible, this possibility can be reduced by ensuring that enough phone lines are available and that the lines *roll over* so that multiple lines can be reached via a single phone number.

In some markets, pricing for dial up-networking is advantageous because pooled *voice minutes* can be used, which bypasses the requirement to pay an additional monthly fee per phone.

Depending on the market you are in, direct Internet connections might be more or less cost effective than circuit-switched dial-up connections. Many cellular providers offer unlimited Internet access for a fixed monthly fee per phone. We recommend that you work with the cellular providers in your market to determine the most cost effective method for establishing routable TCP/IP connectivity to your Diagnostic Server.

Recommendation

While each connectivity method has its own benefits and drawbacks, we recommend that, whenever possible, you use direct Internet connections to provide the fastest and most reliable user experience.