

HP NonStop Remote Server Call/MP enhanced

An article from HP



NonStop Remote Server Call/MP software brings client/server computing to the world of transaction processing by combining the power and convenience of desktop systems with the speed and transaction protection of NonStop servers.

This article, authored by Tim Keefauver, also appears in *The Connection* volume 24, no. 4 (July/August 2003).

Tim Keefauver manages the HP NonStop Enterprise Division product management group for database, client/server computing, platform security, and business continuity.

NonStop Remote Server Call/MP (NonStop RSC/MP), the world-class client/server software for HP NonStop systems, is celebrating its eleventh year—and it just keeps getting better. More than 25 percent of all NonStop installations enjoy the rock-solid availability of this powerful front end to HP NonStop Transaction Services/MP (NonStop TS/MP) software. NonStop RSC/MP software was first released in 1999 as a major replacement for its RSC classic and RSC for Piccolo predecessors. Since then, successive releases have further improved the product. The following is a quick compendium of the enhancements made in the last year and also a peek into the future.

Version 6.3

In September 2002, Version 6.3.1 began shipping. Included among the many improvements is support for two new client platforms:

- Linux client based on Redhat Linux
- Tru64 UNIX® operating system

There is an added charge if you want to use these new clients.

The following existing client platforms were enhanced:

- Multi-threading for Sun Solaris Version 8 was added to the Solaris client package.
- New support was provided for release version C52 of the HP NonStop-UX operating system running on the S5000 CM server.
- A 32-bit Microsoft Windows client can now run on the new Windows XP platform.

This release supports the use of HP Parallel Library TCP/IP software. And finally, by popular demand, the NonStop RSC/MP Host will support 4,095 terminals (clients) per Transaction Delivery Process (TDP)—that's more than four times as many terminals as supported in previous versions of NonStop RSC/MP.

In June 2003, Version 6.3.1 was upgraded via an SPR to support multi-threading in HP-UX clients.

For those currently licensed for NonStop RSC/MP software, these upgrades are available by simply ordering a new CD, at no additional charge. For those that own the RSC classic or RSC for Piccolo product, one must purchase these upgrades.

Support for code fixes for Version 6.3 will continue through the end of 2004. Also, code fix support for the 16-bit Windows client ended in March 2003. The 32-bit Windows client replaces that older product and has been available for several years now under a separate license.

Version 7.0

In September 2003, there are plans to ship Version 7.0, which will offer an optional new client, Microsoft TSE, for an additional charge.

Version 7.0 will also include intelligent device support (IDS) session types. IDS provides additional Screen COBOL support.* For your convenience, 56-kilobyte messages will be supported (the current limit is 31 kilobytes).

Also, upgraded versions of the following client platforms will be available:

- AIX client to support AIX Version 5
- Solaris client to support Solaris Version 9
- SCO UnixWare Version 7.1

Many clients have been supported over the years, and it's time to end code fix support for some of the oldest ones. Therefore, Version 7.0 will no longer allow RSC classic clients to connect to the NonStop RSC/MP Host. Any client earlier than Version 5.1 will not connect to the NonStop RSC/MP Host. So be sure that you have migrated off those discontinued clients prior to upgrading the Host. If you currently use the now discontinued RSC classic products on NonStop S-series systems and want to upgrade to NonStop RSC/MP, you will need to purchase either Version 7.0 or Version 6.3 of NonStop RSC/MP software. RSC for Piccolo clients will continue to be able to connect to the Version 7.0 NonStop RSC/MP Host, although code fix support for the RSC for Piccolo clients ended in September 2001.

The following clients will also be discontinued effective with Version 7.0:

- NonStop-UX operating system
- Tru64 UNIX operating system
- NCR

* Intelligent device support (IDS) is a NonStop session type that was previously supported by RSC classic software, but was never supported by NonStop RSC/MP. To accommodate RSC classic customers who had upgraded their TDP or who were operating mixed RSC classic and RSC/MP installations, support for IDS sessions was retained in the TDP until September 2001 (Version 6.2) when support for IDS and Pathway sessions was removed.

The IDS session type requires the use of a customer-provided IDS requestor written in Screen COBOL. This requestor communicates through the Pathway Terminal Control Process (TCP) to access a Pathway server. It has the capability to perform routing to a message type-dependent server class, and also is responsible for transaction management, as IDS session types are not permitted to use RscBeginTransaction, RscEndTransaction, RscAbortTransaction or to "piggyback" transaction controls on RscWritereads.

You may continue using these clients on Version 6.3, with code fix support until the end of 2004. For customers moving to Version 7.0 of NonStop RSC/MP, a new configuration utility will help to ensure that their installation is configured correctly. This utility will serve to ease the transition to Version 7.0.

Finally, code fix support will end for NonStop RSC/MP Lite with Version 7.0, but again, customers using that product can continue with Version 6.3 and still get code fix support through 2004.

Code fix support for Version 7.0 will continue through 2005. Version 7.0 will be the last version of NonStop RSC/MP that will operate on NonStop K-series systems and also the last version to support OS/2 and Windows 95 clients. Of course, there will be continued support for the Windows 98, Windows 2000, and Windows XP platforms.

Future releases

Regarding the future of NonStop RSC/MP software, HP intends to continue to add more capabilities to this well-proven product in use at thousands of NonStop system installations worldwide. Plans to support the Intel® Itanium® processor for NonStop servers are well along. Also, TCP/IPv6 product planning has begun.

HP can't promise what is coming in future releases at this early date but would like to let you know a little bit about the leading contenders for new functions in releases after Version 7.0.

For a release sometime in 2004, an interface to Java applications is being considered. The interface would include sample code showing how Java developers can use NonStop RSC/MP to access their NonStop servers. The sample code would include examples of both Java based servlets and applications using NonStop RSC/MP via Java Native Interface (JNI) to exchange data between select workstations (for example, those running NonStop RSC/MP clients on HP-UX, IBM AIX, and/or 32-bit Windows platforms) and the NonStop server.

Given the numerous ways Java technology is being used in the NonStop server community, HP believes that NonStop RSC/MP sample code provides the broadest appeal in this diverse community.

The minimum requirements for Java support for NonStop RSC/MP would likely include the Java Development Kit (JDK) 1.4 (or possibly higher) and NonStop RSC/MP and post-Version 7.0 clients for your workstation environment.

Also being considered is Visual Basic .NET support for the 32-bit Windows and/or TSE clients. IPv6 may be supported operating in IPv4 mode. In addition, there are plans for a new release of the Linux client (Linux 7 or 8).

Some older clients will probably be discontinued and replaced by the following newer versions of clients:

| Discontinued client version | New client version |
|-----------------------------|--------------------------|
| Windows 95 | Windows 98, 2000, and XP |
| HP-UX Version 10.2 | HP-UX Version 11 and 11i |
| SCO 5 | SCO UnixWare 7.1 |
| Solaris 2.6 and 7.0 | Solaris 8 and 9 |
| Linux 6.2 | Linux 7 or 8 |

For a late 2004 (or 2005) release of NonStop RSC/MP software, IPv6 technology will probably be supported and would require at least NonStop Kernel Release Version Update G06.20 to operate in IPv6 mode. Also being investigated is interfacing to Application Cluster Services (in the enhanced future version of NonStop TS/MP). Additional client updates are also expected and, of course, there are plans to port NonStop RSC/MP to the NonStop server based on the Itanium processor.

There have been many enhancements to NonStop RSC/MP software in recent years, and the future is bright with even more upgrades planned.

Although this article contains forward-looking plans for NonStop RSC/MP software and other products, none of these references should be construed as a commitment to provide such capabilities, and plans may change without notice.

For more information, go to www.hp.com/go/nonstop.

© Copyright 2003 Hewlett-Packard Development Company, L.P. Remote Server Call (RSC) is based on the Transaction Delivery System (TDS), which is a registered trademark of Cornerstone Software, Inc. Intel and Itanium are trademarks or registered trademarks of Intel Corporation in the U.S. and other countries and are used under license. Java is a U.S. trademark of Sun Microsystems, Inc. Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation. UNIX is a registered trademark of The Open Group. The information contained herein is subject to change without notice. The warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

