Sitting Edition (June 2006)

This edition of the IBM Tivoli System Automation for Multiplatforms® Release Notes applies to IBM Tivoli System Automation for Multiplatforms Version 1.2, program numbers 5639–N53 and 5655–I53, and to all subsequent releases of this product until otherwise indicated in new editions.

IBM welcomes your comments. A form for readers’ comments may be provided at the back of this publication, or you may address your comments to the following address:

IBM Deutschland Entwicklung GmbH
Department 3248
Schoenaicher Str. 220
D-71032 Boeblingen
Federal Republic of Germany

FAX (Germany): 07031+16-3456
FAX (Other Countries): (+49)+7031-16-3456

Internet e-mail: eservdoc@de.ibm.com

If you would like a reply, be sure to include your name, address, telephone number, or FAX number.

Make sure to include the following in your comment or note:
• Title and order number of this book
• Page number or topic related to your comment

When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

© Copyright International Business Machines Corporation 2004, 2006. All rights reserved.
US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.
Read this before Installation

This software may contain errors that could result in critical business impact. It is highly recommended that you install the latest available fixes prior to using this software. Fixes can be obtained from IBM Tivoli System Automation for Multiplatforms support at the following Web site:

The IBM Tivoli System Automation for Multiplatforms 1.2 Release Notes includes information that will help you install this software. To view the most current version of the Release Notes, go to the online Release Notes at the following Web site:
http://publib.boulder.ibm.com/tividd/td/IBMTivoliSystemAutomationforMultiplatforms1.2.html

Required Hardware

IBM Tivoli System Automation runs on all IBM eServer machines running Linux, and on IBM eServer pSeries machines running AIX.
Detailed information about support of specific Linux distributions and AIX versions can be found in the following table:

Table 1. Supported platforms and distributions

<table>
<thead>
<tr>
<th></th>
<th>xSeries</th>
<th>zSeries</th>
<th>pSeries</th>
<th>iSeries</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUSE SLES 7 (32 Bit)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUSE SLSS/SLES 8 (32 Bit) United Unix 1.0</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUSE SLES 9 (32 Bit)</td>
<td>x²</td>
<td>x⁴</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUSE SLES 7 (64 Bit)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUSE SLSS/SLES 8 (64 Bit) United Unix 1.0</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUSE SLES 9 (64 Bit)</td>
<td>x²</td>
<td>x⁴</td>
<td>x²</td>
<td>x⁴</td>
</tr>
<tr>
<td>RedHat 7.2 (32 Bit)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RedHat 7.3 (32 Bit)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RedHat AS 2.1 (32 Bit)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RedHat RHEL 3.0 (32 Bit)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RedHat RHEL 3.0 (64 Bit)</td>
<td>x²</td>
<td>x⁰</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>AIX 5.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIX 5.3</td>
<td></td>
<td></td>
<td></td>
<td>x³</td>
</tr>
</tbody>
</table>

Notes:
1. xSeries and any other 32 bit Intel based Server or AMD Opteron based Server (64 bit).
2. Requires IBM Tivoli System Automation for Multiplatforms 1.2 with fix pack 2.
3. Requires IBM Tivoli System Automation for Multiplatforms 1.2 with fix pack 3.
5. Requires IBM Tivoli System Automation for Multiplatforms 1.2 with fix pack 5.
   Requires RedHat RHEL 3.5 as minimum level.
Where to find IBM Tivoli System Automation for Multiplatforms documentation

Additional documentation about this software can be found either on the product CD or on the product Web site


Prerequisites

The installation of IBM Tivoli System Automation for Multiplatforms 1.2 has the following prerequisites:

- Perl is required to use the command line interface of IBM Tivoli System Automation for Multiplatforms including native RSCT commands. It is per default installed on your Linux or AIX systems as part of the operating system, but if you are using IBM Tivoli System Automation for Multiplatforms language other than English, a special version of Perl may be required. Due to known problems with Perl 5.8.0 and how it handles UTF-8 encoded locales, some characters may not be properly displayed. This can occur on systems with Perl 5.8.0 installed, while using a UTF-8 encoded locale. When previous or subsequent versions of Perl are used, or non-UTF-8 encoded locales are used, this problem does not occur. AIX 5.2 uses Perl 5.8.0 and there is currently no opportunity to order a different version of Perl for that AIX release. If you decide to upgrade your Perl version on a Linux distribution, perform the following steps:

2. Unzip and tar -xvf on any directory.
3. Compile and install on the UTF-8 machine, referring the instruction provided with the downloaded files.
4. Change the symbolic link pointing to the directory of the Perl version that is used by IBM Tivoli System Automation from: /usr/sbin/rsct/perl5/bin/perl->/usr/bin/perl to the directory where the new version of Perl is per default installed: /usr/sbin/rsct/perl5/bin/perl->/usr/local/bin/perl.

- Set the following environment variable for all users of IBM Tivoli System Automation on all nodes: CT_MANAGEMENT_SCOPE=2 (peer domain scope). You can set the variable permanently if you set it in the profile.
- Also make sure that the directory /usr/sbin has at least 100 MB free space, and that the directory /var also provides at least 100 MB free space.
- For languages using the double-byte character set (DBCS), the Telnet dialog buffer must be large enough to ensure that long messages are properly displayed. If this is not the case, enlarge the Telnet dialog buffer.

Additionally, there are special prerequisites in order to install IBM Tivoli System Automation for Multiplatforms on a Linux or AIX system:

Prerequisites on an AIX system

IBM Tivoli System Automation for Multiplatforms requires a certain RSCT level to be installed on that system prior to the installation. The required RSCT levels and their corresponding APAR numbers are listed below:

<table>
<thead>
<tr>
<th>IBM Tivoli System Automation level</th>
<th>IBM Tivoli System Automation version</th>
<th>RSCT version</th>
<th>RSCT APAR number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2 GA</td>
<td>1.2.0.0</td>
<td>2.3.3.1</td>
<td>IY56213</td>
</tr>
<tr>
<td>1.2 fix pack 1</td>
<td>1.2.0.1</td>
<td>2.3.3.3</td>
<td>IY58466</td>
</tr>
<tr>
<td>1.2 fix pack 2</td>
<td>1.2.0.2</td>
<td>2.3.4.2</td>
<td>IY61740</td>
</tr>
<tr>
<td>1.2 fix pack 3</td>
<td>1.2.0.3</td>
<td>2.3.4.4</td>
<td>IY65260</td>
</tr>
</tbody>
</table>
Table 2. RSCT prerequisites on AIX (continued)

<table>
<thead>
<tr>
<th>IBM Tivoli System Automation level</th>
<th>IBM Tivoli System Automation version</th>
<th>RSCT version</th>
<th>RSCT APAR number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2 fix pack 4</td>
<td>1.2.0.4</td>
<td>2.3.5.2 (AIX 5.2)</td>
<td>IY69516 (AIX 5.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4.1.2 (AIX 5.3)</td>
<td>IY68870 (AIX 5.3)</td>
</tr>
<tr>
<td>1.2 fix pack 5</td>
<td>1.2.0.5</td>
<td>2.3.5.2 (AIX 5.2)</td>
<td>IY69516 (AIX 5.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4.1.2 (AIX 5.3)</td>
<td>IY68870 (AIX 5.3)</td>
</tr>
<tr>
<td>1.2 fix pack 6</td>
<td>1.2.0.6</td>
<td>2.3.7.1 (AIX 5.2)</td>
<td>IY76769 (AIX 5.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4.3.1 (AIX 5.3)</td>
<td>IY75315 (AIX 5.3)</td>
</tr>
<tr>
<td>1.2 fix pack 7</td>
<td>1.2.0.7</td>
<td>2.3.7.2 (AIX 5.2)</td>
<td>IY77590 (AIX 5.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4.3.2 (AIX 5.3)</td>
<td>IY77592 (AIX 5.3)</td>
</tr>
<tr>
<td>1.2 fix pack 8</td>
<td>1.2.0.8</td>
<td>2.3.8.1 (AIX 5.2)</td>
<td>IY78663 (AIX 5.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4.4.1 (AIX 5.3)</td>
<td>IY78662 (AIX 5.3)</td>
</tr>
<tr>
<td>1.2 fix pack 9</td>
<td>1.2.0.9</td>
<td>2.3.9.1 (AIX 5.2)</td>
<td>IY83473 (AIX 5.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4.5.1 (AIX 5.3)</td>
<td>IY83474 (AIX 5.3)</td>
</tr>
</tbody>
</table>

Prerequisites on a Linux system

The following prerequisites are required on a Linux system, before this software can be installed:

- The korn shell (pdksh) must be installed.
- If the Linux is running on zSeries under a VM environment, the following VM APAR is required to be installed for the ECKD tiebreaker functionality to work properly:
  VM63119

There are some specific requirements for particular Linux distributions, that are described in the following:

RedHat AS 2.1

xSeries, 32 bit Intel based servers:

If RHAS 2.1 or RHEL 2.1 is used, the library libstdc++ must be upgraded to the 2.96-124 version:

- Copy the `libstdc++-2.96-124.7.2.i386.rpm` to all the nodes where you want to install IBM Tivoli System Automation for Multiplatforms. Depending on your installation you may need to copy `libstdc++-devel-2.96-124.7.2.i386.rpm` as well.
- Run the following on all of the nodes:
  ```bash
  # rpm -U libstdc++-2.96-124.7.2.i386.rpm
  ``
  or, if libstdc++-devel is required as well, run:
  ```bash
  # rpm -U libstdc++-2.96-124.7.2.i386.rpm libstdc++-devel-2.96-124.7.2.i386.rpm
  ``
- Install IBM Tivoli System Automation for Multiplatforms.

RedHat RHEL 3.0

1. xSeries, 32 bit Intel based servers:

   If RHAS 3.0 or RHEL 3.0 is used, the library compat-libstdc++ is required:
   - Check if the compat-libstdc++ is installed, with:
     ```bash
     # rpm -q compat-libstdc++.
     ```

     If it is installed at 7.3-2.96.123 or a higher level, no further action is required. Otherwise, proceed according to the following instructions to install the rpm package:
     - Copy the `compat-libstdc++-7.3-2.96.123.i386.rpm` to all the nodes where you want to install IBM Tivoli System Automation for Multiplatforms. If you cannot find it on the installation CDs, go to: https://rhn.redhat.com/network/software/packages/details.pxt?pid=199449
Release Notes

- Run the following on all of the nodes:
  
  ```bash
  # rpm -U compat-libstdc++-7.3-2.96.123.i386.rpm
  ```

- Install IBM Tivoli System Automation for Multiplatforms.

2. pSeries:
   If RHAS 3.0 or RHEL 3.0 is used, the library compat-libstdc++ is required:
   - Check if the compat-libstdc++ is installed, with:
     ```bash
     # rpm -q compat-libstdc++.n
     ```
   
   If it is installed at 7.3-2.96.123 or a higher level, no further action is required. Otherwise, proceed according to the following instructions to install the rpm package:
   - Copy the `compat-libstdc++-7.3-2.96.123.ppc.rpm` to all the nodes where you want to install IBM Tivoli System Automation for Multiplatforms. If you cannot find it on the installation CDs, go to: https://rhn.redhat.com/network/software/packages/details.pxt?pid=199449.
   - Run the following on all of the nodes:
     ```bash
     # rpm -U compat-libstdc++-7.3-2.96.123.ppc.rpm
     ```
   - Install IBM Tivoli System Automation for Multiplatforms.

SuSE SLES7 / SLES8 on Linux on zSeries

To use the tiebreaker functionality on Linux on zSeries with a SuSE distribution you need to have at least SuSE SLES8 SP3 installed.

SuSE SLES9 on Linux on zSeries

To run IBM Tivoli System Automation on SuSE SLES9 on Linux on zSeries, the Service Pack 1 of SuSE SLES9 has to be installed. This is because the kernel module `softdog.o` is not available in SuSE SLES9 without any Service Pack on Linux on zSeries.

Migration

This part describes what to observe when migrating IBM Tivoli System Automation for Multiplatforms.

Migrating from IBM Tivoli System Automation 1.1 to IBM Tivoli System Automation 1.2

When migrating from IBM Tivoli System Automation release 1.1 to release 1.2 (version number 1.2.0.0), problems may occur if the installed version of RSCT is already higher than the RSCT version that is part of release 1.2. The RSCT version that IBM Tivoli System Automation 1.2.0.0 uses is 2.3.3.1. To check whether a problem may occur, run command

```bash
rpm -q rsct.core
```

rsct.core-2.3.3.3-0

In this example the version is higher than 2.3.3.1. This may occur, for example, if you have upgraded IBM Tivoli System Automation release 1.1 to PTF6 (version number 1.3.1.2) which uses RSCT version 2.3.3.3 or to a higher PTF level.

There are two different scenarios for which you must consider certain actions in order to avoid or circumvent problems:

1. Release 1.2 installation (Linux systems only).
2. Node-by-node migration from release 1.1 to release 1.2.

1. Release 1.2 installation (Linux systems only)

If the already installed version of RSCT is higher than 2.3.3.1, the installation under Linux (for example for Linux on zSeries) ends with:
installSAM: Any packages failed installation. See details below:
installSAM: Installation failed with return-code: 3 : ./rsct.core.utils-2.3.3.1-0.s390.rpm
./rsct.core-2.3.3.1-0.s390.rpm ./rsct.basic-2.3.3.1-0.s390.rpm

Note that some versions of RPM may end with return-code 6 instead of 3.

The IBM Tivoli System Automation code is completely installed and operational, but the license has not been installed. This will result in errors when trying to create a resource group, for example for:

```
mkrg -l none GA
```

the following error is returned:
```
mkrsr-api) 2621-309 Command not allowed as daemon does not have a valid license.
mkrg: An unexpected RMC error occurred. The RMC return code was 1.
```

**Solution:** After IBM Tivoli System Automation 1.2 was installed, you can manually enable the license by following these steps:

1. Change to the top installation directory on the installation media (for example /tmp/SAM12) to identify the name of the license file.
2. Run command:
   ```
   find . -name *.lic
   ```
   which should return:
   ```
   ./license/sam.lic
   ```
   (if you have a full license) or
   ```
   ./license/samtb.lic
   ```
   (if you have a try-and-buy license)
3. In order to install the license run command:
   ```
   samlicm -i ./license/sam.lic
   ```
   or
   ```
   samlicm -i ./license/samtb.lic
   ```
4. Verify that the license is installed using command:
   ```
   samlicm -s
   ```
   which should return:
   ```
   Product ID: 5588
   Creation date: Wed May 12 02:00:00 2004
   Expiration date: Fri Jan 1 00:59:59 2038
   ```

   Similar output with other dates will be shown, if there is a try-and-buy license installed.

2. Node-by-node migration from IBM Tivoli System Automation release 1.1 to release 1.2

If the already installed version of RSCT is higher than 2.3.3.1, a problem occurs if you restart the upgraded node right after installing IBM Tivoli System Automation release 1.2. The newly upgraded IBM Tivoli System Automation 1.2.0.0 Recovery Resource Manager daemon cannot handle this situation and will set the active version number to 1.2.0.0 while the rest of nodes in the cluster are actually running under the release 1.1 level, for example 1.1.3.2.

**Solution:** The problem described above has been fixed in IBM Tivoli System Automation fix pack 1 (version 1.2.0.1). The correct procedure to perform node by node migration from IBM Tivoli System
Release Notes

Automation release 1.1 to release 1.2 is to apply both the release 1.2 initial code level (version 1.2.0.0) and the highest available release 1.2 fix pack 2 (for example 1.2.0.1 or higher) together before restarting the upgraded node. If you are doing node by node migration from release 1.1 to release 1.2 code level, please do not restart the upgraded release 1.2 node without applying also the latest release 1.2 fix pack. If you restart the entire RSCT peer domain and it contains a mixed level of IBM Tivoli System Automation for Multiplatforms release 1.1 (version 1.1.3.2 and above) and release 1.2 nodes, please ensure that the release 1.1 nodes start first.

Recommendations when running on Linux on zSeries under zVM

When running IBM Tivoli System Automation for Multiplatforms 1.2 on Linux on zSeries in a zVM environment, the following configuration changes are highly recommended:


   In case you run a one or two node cluster you need some additional configuration to detect network interface failures. The cluster software periodically tries to reach each network interface of the cluster. If there is a two node cluster and one interface fails on one node, the other interface on the other node is not able to get response from the peer and will also be flagged offline. To avoid this behavior the cluster software must be told to contact a network instance outside the cluster. Best practice is to use the default gateway of the subnet the interface is in. On each node create following file:/usr/sbin/cluster/netmon.cf. Each line of this file should contain the machine name or IP address of the external instance. An IP address should be specified in dotted decimal format. If the machine is connected to more then one IP sub net using different network interfaces, then an entry for each IP sub net is required in the netmon.cf file. This is an example of a /usr/sbin/cluster/netmon.cf file:

   # default gateway for all interfaces in 192.168.1.0 network
   192.168.1.1

   # default gateway for all interfaces in 192.168.2.0 network
   gw.de.ibm.com

2. Turn off broadcast for all communication groups

   The RSCT heartbeat mechanism performs a broadcast ping from time to time. This is especially often the case in situations, where a network interface adapter is not available. The reason for this feature is to find out, whether the network interface adapter that sends this broadcast ping is still operational (this can be determined upon whether other machines reply to this broadcast ping or not). Now, this feature is not needed, if the netmon.cf file is setup correctly as described above, as in that case, there are other well-known network interface adapters to be checked for availability.

   While a broadcast ping on a stand-alone machine is not a performance issue, it will have a negative impact on the performance, if the machines are running in a zVM environment. This is because all other systems running under this zVM and within the same network segment (same IP network and net mask) will reply to this broadcast ping request. As a result, even VM guest systems, that are idle and currently paged out will be loaded into the zVM just to reply to this ping. Depending on the number of guest systems running under this zVM this may decrease the performance of the whole z/VM system.

   In order to prevent this situation from happening, the following setup changes are highly recommended:

   • get all the communication groups of the cluster
     # lscomg

   • turn off broadcast for all communication groups
     # chcomg -x b <communication group> ... ( e.g.: chcomg -x b CG1 )

   Verify that broadcast is turned off using the lscomg command, after the above changes are done.
Service

Fixes and Problem-Solving Databases

The information about fixes and service updates for this software can be found at the following web page:


National Language Support

IBM Tivoli System Automation for Multiplatforms 1.2 is NLS enabled. The list of supported languages is described in the IBM Tivoli System Automation Guide and Reference. However, the NLS support for Portuguese/Brazilian (pt_BR / PT_BR) is not contained in the release 1.2 initial version. It has been shipped with fix pack 1. If you want to use this language, get and install fix pack 1 first.

There is a known problem with NLS: TEC event messages are always in the locale which is the default system locale on the node where the IBM Tivoli System Automation for Multiplatforms master is running. In order to switch the TEC event message language, the default system locale on all nodes in the cluster must be switched. The TEC event messages are corrupted, if the user created the resources (mkrg, mkrsrc) in a shell with a different locale as the default system locale.

Known Problems and Issues

MonitorCommandTimeout for resources of resource class IBM.Application

The value for the MonitorCommandTimeout attribute must be lower than 120 seconds. This will ensure that a MonitorCommand is finished within that time period. If the MonitorCommand for a resource takes longer then 120 seconds during a resource validation, the resource manager IBM.RecoveryRM will die intentionally and no automation of resources will be performed. (See also APAR IY80589)
**Notices**

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user’s responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing  
IBM Corporation  
North Castle Drive  
Armonk, NY 10504-1785  
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation  
Licensing  
2-31 Roppongi 3-chome, Minato-ku  
Tokyo 106, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation  
Department LJEB/P905  
2455 South Road Road  
Poughkeepsie, New York 12601-5400  
U.S.A.
Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrates programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. You may copy, modify, and distribute these sample programs in any form without payment to IBM for the purposes of developing, using, marketing, or distributing application programs conforming to IBM’s application programming interfaces.

Trademarks

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

- IBM, AIX, AIX 5L, Netfinity, RS/6000, SP, and the e (logo) are trademarks or registered trademarks of International Business Machines Corporation.
- Equinox is a trademark of Equinox Systems, Inc.
- Linux is a trademark of Linus Torvalds in the United States, other countries, or both.
- Myrinet is a trademark of Myricom, Inc.
- Red Hat and RPM are trademarks of Red Hat, Incorporated.
- Java and all Java-based trademarks and logos are registered trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.
- UNIX is a registered trademark of The Open Group in the United States and other countries.
- Other company, product, or service names may be the trademarks or service marks of others.
Readers’ Comments — We’d Like to Hear from You

System Automation for Multiplatforms
Release Notes
Version 1.2

Publication No. SC33-8209-06

Overall, how satisfied are you with the information in this book?

<table>
<thead>
<tr>
<th>Overall satisfaction</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How satisfied are you that the information in this book is:

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accurate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy to find</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy to understand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well organized</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applicable to your tasks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please tell us how we can improve this book:

Thank you for your responses. May we contact you? □ Yes □ No

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes appropriate without incurring any obligation to you. IBM or any other organizations will only use the personal information that you supply to contact you about the issues that you state on this form.

Name

Address

Company or Organization

Phone No.
Readers' Comments — We'd Like to Hear from You