Release Notes

Version 2.1
Chapter 1. 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 2.1 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:

This release notes document contains the latest updates for the product IBM Tivoli System Automation for Multiplatforms. This product consists of two components, base and end-to-end. Updates for the base component of IBM Tivoli System Automation for Multiplatforms are contained in Chapter 2, “IBM Tivoli System Automation for Multiplatforms 2.1 – Base Component,” on page 3, updates for the end-to-end component are located in Chapter 3, “IBM Tivoli System Automation for Multiplatforms 2.1 - End-to-End Management Component,” on page 7 of this document.

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
Chapter 2. IBM Tivoli System Automation for Multiplatforms
2.1 – Base Component

Required Hardware and Software

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 for the base component of IBM Tivoli System Automation for Multiplatforms

<table>
<thead>
<tr>
<th>Platform</th>
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<th>zSeries</th>
<th>pSeries</th>
<th>iSeries</th>
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<td>United Linux 1.0</td>
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<tr>
<td>SUSE SLES 9 (32 Bit)</td>
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<td>x³</td>
<td></td>
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<td>SUSE SLSS/SLES 8 (64 Bit)</td>
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<td>x</td>
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<tr>
<td>AIX 5.3</td>
<td></td>
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<td></td>
<td>x</td>
</tr>
</tbody>
</table>

Notes:
1. xSeries and any other 32 bit Intel based Server or AMD Opteron based Server (64 bit).
2. Requires SuSE SLES8 SP3.
3. Requires SuSE SLES9 SP1.
4. Requires RedHat RHEL 3.5 as a minimum level.

Prerequisites

The installation of IBM Tivoli System Automation for Multiplatforms 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 in a 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.

- If you are both using the AIX 5.2 platform and the IBM Tivoli System Automation for Multiplatforms System Automation for Multiplatforms end-to-end automation adapter, make sure to have a pam.conf file in the /etc directory. You can find a sample pam.conf file in the SAM2100Base/AIX directory.

- When using the end-to-end automation adapter make sure that all nodes where the adapter can run are accessible with the same user ID and password

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>
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<tr>
<td>2.1 GA</td>
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<td>2.3.7.1 (AIX 5.2)</td>
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<tr>
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<td></td>
<td>2.4.3.1 (AIX 5.3)</td>
<td>IY75315 (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

- The 32bit compatibility libraries must be installed on each Linux system, even if a 64bit kernel is running, before IBM Tivoli System Automation can be installed. These libraries are contained in the following RPM packages:
  compat on systems running SuSE SLES Linux
  compat-libstdc++ on systems running RedHat RHEL Linux
Migration
This part describes what to observe when migrating IBM Tivoli System Automation for Multiplatforms.

Migration from IBM Tivoli System Automation for Multiplatforms 1.1
A direct migration from IBM Tivoli System Automation 1.1 to IBM Tivoli System Automation 2.1 is not supported.

Migrating from IBM Tivoli System Automation 1.2
IBM Tivoli System Automation for Multiplatforms 1.2 can be migrated to IBM Tivoli System Automation for Multiplatforms 2.1. The migration process is described in the IBM Tivoli System Automation for Multiplatforms Base Component User’s Guide manual, SC33-8210.

Recommendations when running on Linux on zSeries under zVM
When running IBM Tivoli System Automation for Multiplatforms 2.1 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 of 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: http://www-306.ibm.com/software/sysmgmt/products/support/IBMTivoliSystemAutomationforLinux.html.

**National Language Support**
IBM Tivoli System Automation for Multiplatforms 2.1 is NLS enabled. The list of supported languages is described in the *IBM Tivoli System Automation for Multiplatforms Base Component User’s Guide* manual.

Some RSCT related messages may be displayed in English only. This is because the translation of the RSCT messages was done for the initial shipment of the RSCT release, whereas IBM Tivoli System Automation for Multiplatforms bases on a higher level of the RSCT release.

**Known Problems and Issues**
There are actually no known problems or issues regarding this software.
Chapter 3. IBM Tivoli System Automation for Multiplatforms
2.1 - End-to-End Management Component

Required Hardware and Software

Table 3. Supported platforms and distributions for the end-to-end component of IBM Tivoli System Automation for Multiplatforms

<table>
<thead>
<tr>
<th>Platform</th>
<th>xSeries</th>
<th>zSeries</th>
<th>pSeries</th>
<th>iSeries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows Server 2003 Standard Edition (32bit)</td>
<td>x</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Windows Server 2003 Enterprise Edition (32bit)</td>
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<tr>
<td>SUSE SLES8 SP3 (32 bit)</td>
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<tr>
<td>SUSE SLES9 (64 bit)</td>
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<td>x²</td>
<td>x</td>
<td>x</td>
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<tr>
<td>RedHat RHEL 3.0 AS QU3 (32 Bit)</td>
<td>x³</td>
<td>x⁴</td>
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</tr>
<tr>
<td>RedHat RHEL 3.0 AS QU3 (64 Bit)⁵</td>
<td></td>
<td></td>
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<tr>
<td>AIX 5.2 ML5</td>
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<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>AIX 5.3 ML1⁵</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

Notes:

1. IBM x/Series systems with IA32, EM64T, or AMD64 architecture. Any other systems with IA32, EM64T, or AMD64 architecture are also supported. Systems with IA64 architecture are not supported.
2. SUSE SLES 9 on s390x kernel requires IBM DB2 UDB Version 8.2 Run-Time Client with Fix Pack 10 running as 31 bit application. This precludes IBM DB2 UDB Version 8.2 server from running on the same system, that is, remote DB2 setup is required.
3. Red Hat RHEL 3.0 AS QU3 with x86 kernel architecture requires the following packages:
   - compat-gcc-7.3-2.96.122
   - compat-libstdc++-7.3-2.96.122
   - compat-libstdc++-devel-7.3-2.96.122
   - compat-glibc-7.x-2.2.4.32.5
   - compat-gcc-c++-7.3-2.96.122
   - compat-db-4.0.14-5
   - rpm-build-4.2.1-4.2
4. Red Hat RHEL 3.0 AS QU3 with s390 kernel architecture requires the following packages:
   - compat-libstdc++-7.2.2-2.95.3.77
   - compat-db-4.0.14-5
   - rpm-build-4.2.1-4.2
   - compat-pwdb-0.62-3
5. Red Hat RHEL 3.0 AS QU3 with ppc64 kernel architecture requires the following packages:
   - rpm-build-4.2.1-4.2

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6. Kernel version 5.3.0.22 is required.

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**Prerequisites**

The list of prerequisites can be found in the manual *IBM Tivoli System Automation for Multiplatforms End-to-End Automation Management, SC33-8211.*

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**Service**

**Fixes and Problem-Solving Databases**


**National Language Support**

IBM Tivoli System Automation for Multiplatforms 2.1 is NLS enabled. The list of supported languages is described in the *IBM Tivoli System Automation for Multiplatforms End-to-End Automation Management User's Guide and Reference* manual.

Known problems with NLS:
1. Bi-directional locales are not supported by the end-to-end automation management component of IBM Tivoli System Automation for Multiplatforms Version 2.1. However, the base component supports all locales, including bi-directional.
2. The input method editor (IME) cannot be activated on both the adapter configuration dialog and the end-to-end automation management configuration dialog of IBM Tivoli System Automation for Multiplatforms. Because IME is required for entering DBCS characters, non-ASCII characters cannot be entered. Use a copy and paste function to enter DBCS characters in the configuration dialogs to solve this problem.

**Known Problems and Issues**

**A plugin domain name needs to be specified if no XCF group suffix is used for the System Automation for z/OS domain**

For System Automation for z/OS automation domains that should join the end-to-end automation manager a problem exists when no XCF group suffix is specified (this is specified in the NetView dsiparm member INGXINIT, the Automation Manager parmlib member HSAPRMxx, and the end-to-end automation adapter properties file ing.adapter.plugin.properties). Resource References that are referencing resources on these domains cannot be resolved, and the resources are displayed with error icons on the end-to-end management console. As workaround you have to uncomment the plugin-domain-name in ing.adapter.plugin.properties of the end-to-end automation adapter and define an own unique domain name. The AutomationDomain tag of these resource references in the end-to-end policy must match this newly defined domain name.
Operations Console
This is some additional information regarding the operations console.

Additional Information

Which user ID and password do I have to specify in the "Automation domain authentication" panel?
When selecting a first-level automation domain in the operations console for the first time, a panel will come up prompting for the user ID and password for this domain. You have to specify a user ID and password that is allowed to login to the system on which the domain's automation adapter is currently running.

Hint: You can also store the user ID and password for each automation domain in a credential vault, by selecting the option "Save this in the credential vault for further usage". For all automation domains for which you have stored the credentials in the credential vault, the login will be performed automatically. You will not get prompted again for credentials until you delete the credentials again using the Preferences dialog, or if the automatic login fails.

Known Problem and Issues

Installation
1. The installation of the Operations Console fails, if the default install location is changed. In this case the last installation panel shows the wrong entry end-to-end Automation Manager. The installation finally fails with the error:
   DB2 Config RC = 1. For details see: /opt/IBM/itsamp/eez/console/install/logs/DB2Config.log
2. When selecting "Cancel" during preinstall, a confirmation dialog is shown "Do you want to exit?". However, cleanup has already been performed. So if a preinstallation has been cancelled, the cancel has to be confirmed, and the preinstallation process cannot be resumed.

End-to-End Automation Adapter

National Language Support
Known problems with NLS:
• If you use a UTF-8 locale in a console on KDE 3.2.1/Qt 3.3.1, the title bars of the end-to-end automation adapter configuration windows may not display non-ASCII characters correctly. As a workaround, switch to a non UTF-8 locale before starting the end-to-end automation adapter dialog. This is a SUSE problem, for which a problem report has been opened.
• The input method editor (IME) cannot be activated on both the adapter configuration dialog and the end-to-end automation management configuration dialog of IBM Tivoli System Automation for Multiplatforms. Because IME is required for entering DBCS characters, non-ASCII characters cannot be entered. Use a copy and paste function to enter DBCS characters in the configuration dialogs to solve this problem.
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IBM Tivoli System Automation for Multiplatforms
Release Notes
Version 2.1

Publication No. SC33-8214-00

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<tr>
<th>Overall satisfaction</th>
<th>Very Satisfied</th>
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<th>Neutral</th>
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<td>Well organized</td>
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<tr>
<td>Applicable to your tasks</td>
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</table>

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