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Release Notes

These release notes provide important information about Tivoli® Management Framework, Version 3.7B. These notes are the most current information for the product. Review these release notes thoroughly before installing or using this product.


These release notes cover only the use of Tivoli Management Framework and its associated defects. For information about the Tivoli Enterprise™ installation and system requirements of Tivoli Management Framework, see the Tivoli Enterprise Installation Release Notes.

These release notes include the following topics:

■ Contacting Customer Support
■ New Features in Version 3.7B
■ Compatibility and Interoperability
■ Product Notes
■ Defects Fixed in Version 3.7B
■ Known Product Defects, Limitations, and Workarounds

Both Tivoli and TME® 10 are used in our sales, marketing, and product literature. These terms are interchangeable with Tivoli Management Framework. References to TME 10 will be removed in future product releases.
In addition, a Tivoli endpoint is sometimes called a Tivoli management agent, lcfd, Tivoli Lightweight Client, or endpoint daemon. All these terms refer to the Tivoli process running on the endpoint client.

**Contacting Customer Support**

If you need support for this or any Tivoli product, contact Tivoli Customer Support in one of the following ways:

- Submit a PMR electronically through the IBMLink™ system. For information about IBMLink registration and access, refer to the IBM® Web page at [http://www.ibmlink.ibm.com](http://www.ibmlink.ibm.com).
- Send e-mail to support@tivoli.com.
- Customers in the U.S. can call **1-800-TIVOLI8** (1-800-848-6548).
- Customers outside the U.S. should refer to the Tivoli Customer Support Web site at [http://www.tivoli.com/support/locations.html](http://www.tivoli.com/support/locations.html) for customer support telephone numbers.

When you contact Tivoli Customer Support, be prepared to provide the customer number for your company so that support personnel can assist you more readily.

We are very interested in hearing from you about your experience with Tivoli products and documentation. We welcome your suggestions for improvements. If you have comments or suggestions about this documentation, please send e-mail to pubs@tivoli.com.

**New Features in Version 3.7B**

New functionality in Tivoli Management Framework, Version 3.7B, is available to Tivoli applications that support that functionality. See the specific Tivoli application documentation to determine if this new functionality is supported by the Tivoli application that you want to use.
The following sections describe functionality included in Tivoli Management Framework, Version 3.7B. The APAR number (if available) precedes the description of each feature, and the CMVC defect number (if available) follows the description.

* —The asterisk symbol denotes features introduced between Tivoli Management Framework, Version 3.7 and Version 3.7B.

**Multiplexed Distribution Service—MDist 2**

The new multiplexed distribution service, MDist 2, gives you the ability to monitor and control a distribution throughout its lifecycle. The Tivoli Distribution Status console and `wmdist` command include the following functionality:

- **Asynchronous delivery** enables you to submit multiple distributions from the same host without typing up your system.

- **Assured delivery** resumes distributions after network errors occur. If a connection to a target cannot be established, the distribution is safely maintained in the repeater depot until the connection is reestablished and the distribution delivered.

- **Checkpoint restart** enables a distribution that has been interrupted to resume from the last successful checkpoint where it stopped. A handshake occurs at each connecting system, so that if a failure within the distribution hierarchy occurs, you do not need to resend the distribution.

- **Distribution monitoring** enables you to monitor the ongoing status of a distribution. You can see which target nodes received the distribution, see which experienced errors, and estimate when the distribution will finish.

- **Distribution control** enables you to pause, resume, and cancel one or more distributions. You also can delete distributions manually or set an interval at which completed distributions are automatically removed from the database.
New Features in Version 3.7B

- **Total repeater resource limits** for memory, disk space, and connections now apply to all distributions active on a repeater. In the original MDist service, these limits are only per distribution.

  For more information about MDist 2, see the *Tivoli Management Framework User’s Guide, Version 3.7*.

**Network Address Translation Support**

*-Network Address Translation (NAT) devices act as a conduit between two address spaces within an organization. NAT devices create virtual private networks by acting as a router between the spaces. Additionally, they transform IP addresses from private to public one way and from public to private in the reverse direction. In most cases, NAT devices share the public IP address space with a larger private address space.

Basic NAT maps only the IP addresses of packets when they traverse through address space boundaries. Network Address Port Translation (NAPT) alters both the addresses and the ports.

NAT is supported in Version 3.7B; NAPT is not supported.

Tivoli Management Framework currently supports the use of NAT in the following ways:

- Between a gateway and endpoints
- Between managed nodes

**Enabling Network Address Translation**

Tivoli Management Framework, Version 3.7B, supports NAT boxes in the following configurations. Before upgrading any systems in a NAT environment to Version 3.7B, ensure that the following NAT environment requirements are met:

- Each managed node or endpoint must have only one fully qualified domain name.
- A managed node or endpoint cannot have multiple interfaces mapping to a single host name. If a managed node has multiple IP addresses, each must resolve to a unique host name.
- For NAT support across a Tivoli management region, each system
must be able to be identified by a unique, fully qualified host name. Each host can use a different naming mechanism, such as Domain Name Server (DNS) service or any related resource (for example, Network Information Services [NIS] maps or a local /etc/hosts file). The naming mechanism provides a secure name resolution service that resolves host name addresses on both sides of the address resolution space. It is essential that the administrator ensures that all of these mechanisms resolve a given host name uniquely across the region.

Note: When using DNS, it must support the extensions for Dynamic Domain Name Service as specified by RFC 2316.

All managed nodes and gateways in the Tivoli management region must be upgraded to Version 3.7B, because NAT support is enabled at the Tivoli management region level.

Note: If you have an IBM OS/2® or OS/400® gateway in your Tivoli management region, you cannot enable NAT support. These resources are not at the Version 3.7B level. The OS/400 gateway must operate either as an endpoint within a NAT-enabled region or as a gateway within a separate, but interconnected, region.

After upgrading the Tivoli management region server to Version 3.7B, run the following commands on the server to enable NAT:

```
odadmin set_allow_NAT TRUE
odadmin set_iom_by_name TRUE
odadmin reexec 1
```

After running these commands, upgrade all other managed nodes in the Tivoli management region to Tivoli Management Framework, Version 3.7B. The `odadmin odlist` command displays fully qualified domain names for all managed nodes.

Notes:

- Do not use IP addresses in installation or operational scripts when deploying Tivoli Enterprise products in a NAT environment.

- The `odadmin` command includes a new `set_allow_NAT` option. Any time that the `set_allow_NAT` option is run, the
New Features in Version 3.7B

endpoint manager and the gateways must be restarted for the changes to take effect. The values for the `set_allow_NAT` option are TRUE and FALSE; the default is FALSE.
New Features in Version 3.7B

- The odadmin command includes a new get_allow_NAT option. This option verifies the value of the set_allow_NAT option.

Commands Changed by Network Address Translation

The following commands change behavior in a NAT environment:

- The winstlcf –g command specifies the gateways to use for the initial login when installing endpoints. The gateways must be specified as fully qualified names and not as IP addresses.

  **Note:** Direct specification of gateway IP addresses fails in a NAT environment.

- The output of the odadmin odlist command depends on the value of the set_allow_NAT option. When the set_allow_NAT option is set to TRUE, the IP addresses are not displayed.

- Before migrating an endpoint in a NAT environment, you must run the wep set gateway command before making any upcalls or downcalls.

Interoperability

NAT support is a feature of Tivoli Management Framework, Version 3.7B. Releases that do not support NAT are not compatible with releases that support NAT. NAT managed nodes cannot communicate with non-NAT managed nodes. However, the following combinations between gateways and endpoints are supported:

- Non-NAT endpoint to non-NAT gateway
- Non-NAT endpoint to NAT gateway
- NAT endpoint to non-NAT gateway
- NAT endpoint to NAT gateway

Tivoli Enterprise software supports Kerberos 4.0. Kerberos 4.0 depends on static IP addresses. Therefore, Kerberos and NAT cannot coexist.
New Features in Version 3.7B

**Novell NetWare Gateway Support**

Tivoli Management Framework supports gateways on Novell NetWare. For more information, see the *Tivoli Management Framework Planning for Deployment Guide, Version 3.7*.

Tivoli Management Framework also supports Internetwork Packet Exchange (IPX) connectivity with Microsoft Windows 95, Windows 98, Windows NT®, Windows 2000, and NetWare endpoints.

The following list provides information about IPX support and the existing Transmission Control Protocol/Internet Protocol (TCP/IP) support. See the *Tivoli Management Framework Reference Manual, Version 3.7* for more information about these commands.

- For the `wgateway` command, the `add_protocol` option adds either TCP/IP or the IPX protocol to a gateway. The `rm_protocol` option removes an IPX protocol. The TCP/IP protocol cannot be removed. The `set_protocol` option sets the protocol for the specified gateway.

- For the `wcrtgate` command, the `-i IPX_socket_num` option specifies on which port the gateway listens for Sequenced Packet Exchange (SPX) packets. The `-p TCPIP_port` option specifies through which TCP/IP port number the gateway communicates with its assigned endpoints. The `-P protocols_list` option specifies the supported protocols for a specified gateway.

- For the `winstlcf` command, the `-x protocol` option specifies the protocol used by endpoints to be installed. You can specify `-x TCPIP` or `-x IPX`.

- For the `lcfd` command, the `-D bcast_disable` option can disable the IPX broadcast when set to 1. The `-D lcs.login_interfaces` option can specify the IPX address of one or more gateways to which an endpoint sends its login packet. The `-D protocol` option identifies the protocol on which the endpoint service monitors gateway communications. The `-g` option specifies either the IP address or the IPX address, according to which protocol is used. The `-x protocol` option specifies the protocol used by an endpoint to communicate with its assigned gateway. You can specify `-x TCPIP` or `-x IPX`.
Windows 2000 Support

—Tivoli Management Framework, Version 3.7B, provides support for creating Tivoli management region servers, managed nodes, and gateways on Windows 2000 systems. In Version 3.7, these managed resources had to be created through an upgrade scenario.

Tivoli Management Framework supports the following versions of Windows 2000:

■ Windows 2000 Professional
■ Windows 2000 Server
■ Windows 2000 Advanced Server

Note: RIM, Query, and related database tools are not currently certified to run on any Windows 2000 configuration and are not supported until certified.

General

1. APAR-IX68020: The \texttt{wrestart} command includes a \texttt{-f} option, which enables you to initiate a restart or reboot that does not prompt for user input. See the \textit{Tivoli Management Framework Reference Manual, Version 3.7} for more information. (CMVC-23223)

2. APAR-IX72026, APAR-IX77700: The \texttt{wgetadmin} command includes \texttt{-p}, \texttt{-u}, and \texttt{-i} options. The \texttt{-p} option provides detailed information about an administrator’s subscribed notice groups. The \texttt{-u} and \texttt{-i} (for user and interpreter type) options report the actual login used by an administrator when performing actions. See the \textit{Tivoli Management Framework Reference Manual, Version 3.7} for more information. (CMVC-30234, 38503)

3. APAR-IX80750: There are two new commands: \texttt{wsetpkey} and \texttt{wrunas}. The \texttt{wsetpkey} command encrypts and stores a password in the registry, using the same application programming interface (API) that Windows NT uses for storing passwords. The \texttt{wrunas} command retrieves the password from the registry, uses the Microsoft authentication package, and launches a given command. Use the \texttt{wrunas} command in a task library script or a Tivoli
New Features in Version 3.7B

Application Extension Facility (AEF) script to launch executable files from the Tivoli desktop. These scripts must be installed to run as $root_user. (CMVC-44398)
4. APAR-IX83267: The `wsub` command includes a `–r` option, which returns an appropriate error message if the managed node you specify is down. See the Tivoli Management Framework Reference Manual, Version 3.7 for more information.

5. APAR-IX83521: The `wbkupdb` command includes a `–s` option, which suppresses the display of Backup in Progress windows. See the Tivoli Management Framework Reference Manual, Version 3.7 for more information.

6. APAR-IX84257: In certain network configurations, notably those that include heavily saturated slow links, messages between transaction managers might be delayed for longer than the default transaction timeout of 5 minutes. This might cause management operations to fail with spurious transaction errors. To adjust the default timeout value, use the `odadmin` command with the new `set_tmgr_retries` option. The transaction manager retries messages once per minute, so the number of retries is equivalent to the number of minutes that it should wait before aborting a transaction.

   This value is adjusted on a per region basis; every dispatcher in the region gets the same value. The new value takes effect the next time a dispatcher is restarted or reexecuted.

7. APAR-IX89267: The advanced user right Bypass Traverse Checking is added to the `tmersrvd` account at the time the account is generated. If the `tmersrvd` account has already been created, use the `$BINDIR/TAS/INSTALL/ntconfig.exe` file on the local system to add this right to the `tmersrvd` account.

8. APAR-IX89276: The following two scenarios are supported:
   a. A Windows NT environment where all Windows NT systems in the region do not have access to a domain account that can be used (has all the privileges) to run privileged tasks or where all the Windows NT systems do not have a local account with the same name.
   b. A region encompassing multiple Windows NT domains where each domain has an account that is used to run privileged tasks, but in which the account names are different.
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**Note:** A combination of these two scenarios is supported.

If you have Windows NT systems with different administrator accounts, use the `widmap` command to map these accounts to the built-in administration account instead of an account specified by name. For example, map the `$root_user` map to `BuiltInNTAdministrator` as shown:

```bash
widmap rm_entry root_user w32-ix86
widmap add_entry root_user w32-ix86 BuiltInNTAdministrator
```

For more information, see the *Tivoli Enterprise Installation Guide, Version 3.7.* (CMVC-86595)

9. APAR-IY01990: The `startlcf.exe` command includes a `-H` option, which hides the endpoint daemon.

10. APAR-IY07243: The `wlsinst` command includes a `-V` option, which prints out the path to each component, replacing any space at the end of the path name with a slash (`/`). See the *Tivoli Management Framework Reference Manual, Version 3.7* for more information.

11. The `oserv` command includes a `-S` option, which suppresses the output to `syslogd`. See the *Tivoli Management Framework Reference Manual, Version 3.7* for more information. (CMVC-81265)

12. Use the `odadmin set_rpc_max_threads` command to set the number of concurrent object call threads and the number of concurrent remote procedure call threads in the dispatcher.

**Endpoints and Gateways**

1. APAR-IX79783: From the command line, the endpoint label, policy region, and share name can now be specified by using the `winstlcf` command. See the *Tivoli Management Framework Reference Manual, Version 3.7* for more information. (CMVC-42794, 49022)

2. APAR-IX82775: The `wdelep` command includes a `-d` option, which stops the endpoint and removes the `lcf.dat` file on the endpoint. See the *Tivoli Management Framework Reference Manual, Version 3.7* for more information. (CMVC-82715)
3. APAR-IX82909, IX83802, IY00645: Features have been added in the endpoint manager and gateway to handle the load from large numbers of logins. The endpoint manager refrains from creating duplicate endpoint records when it receives more than one initial login by broadcast. Three new attributes that handle the number of policy scripts that can be active simultaneously have been added to the endpoint manager. In place of the single max_jobs attribute, there is one attribute for each of the policy scripts that run at the endpoint manager:

- **max_install** specifies the number of maximum allow_install_policy scripts.
- **max_sgp** specifies the number of maximum select_gateway_policy scripts.
- **max_after** specifies the number of maximum after_install_policy scripts.

**Note:** Setting the max_jobs attribute no longer has an effect on the login process.

For each attribute, the default value is 10. When using the default values, a maximum of 30 scripts can run on an endpoint manager. When additional requests come into the endpoint manager and exceed the attribute settings, the requests are queued.

Use the wepmgr command to get the current value for the EndpointManager object attributes.

In addition to the three new attributes, a login throttling mechanism has been added to endpoint managers and gateways. This is controlled with a new option login_interval of the wepmgr command. See the Tivoli Management Framework Reference Manual, Version 3.7 for more information.

Logins from the same endpoint that appear in intervals less than the value specified in the login_interval option are ignored. This interval can prevent the duplication effects of multiple initial logins from the same endpoint (same IP address) to multiple intercepting gateways. Exceptions are made for the following:

- initial and normal login sequence
- isolation and normal login sequence
Endpoints logging in immediately after an upgrade also are exceptions if the upgrade installed a new version of the endpoint. If the upgrade was a reinstallation of the same endpoint version that was on the endpoint, the `login_interval` can cause the login after the upgrade to be ignored, resulting in an error message on the gateway. The error message reports a failure to establish a connection to the endpoint. This error message does not indicate that the upgrade failed. Rather, it indicates that the gateway cannot confirm that the upgrade was successful.

Before implementing these login features, review the appropriate login options for the endpoint, the gateway, and the endpoint manager to ensure that the timing of these variables does not conflict with your particular network configuration, Tivoli environment, and Tivoli implementation strategy. See the *Tivoli Management Framework Planning for Deployment Guide, Version 3.7* for more information about the login options. (CMVC-54924)

4. APAR-IX83459: Use the `lcfd -D local_ip_interface` command to bind an endpoint to a specific IP address. In previous releases, you could specify only a host name to indicate the desired IP address for an endpoint. See the *Tivoli Management Framework Reference Manual, Version 3.7* for more information.

5. APAR-IX85574: Use the `lcfd` command to completely disable the endpoint Web interface or set it for view only. See the *Tivoli Management Framework Reference Manual, Version 3.7* for more information. (CMVC-74321)

6. APAR-IX85891: The `lcfd` command includes a `-H` option, which enables you to start the endpoint on OS/2 systems in detached mode. See the *Tivoli Management Framework Reference Manual, Version 3.7* for more information.

7. APAR-IX89887: Use the `wepmgr epmgr_flags` command to enable orphaned endpoints to be added back to the TMR during an endpoint's isolated login attempt. See the *Tivoli Management Framework Maintenance and Troubleshooting Guide, Version 3.7* for more information.
8. APAR-IY00354: The endpoint manager checks for and resolves internal inconsistencies to prevent errors during initialization. Also, the `wep` command includes `view` and `del` options, which enable you to view and delete duplicate endpoint entries in the endpoint manager respectively. See the *Tivoli Management Framework Reference Manual, Version 3.7* for more information.

9. APAR-IY00644, IY01536: The `wep` command includes the `set_label` and the `set address` options. The `set_label` option changes the current label to a new label. The `set address` option changes the IP address of an endpoint. See the *Tivoli Management Framework Reference Manual, Version 3.7* for more information.

10. APAR-IY01097: Assigned dispatcher numbers for endpoints and managed nodes in a region are limited to a total of 2,147,483,612. (CMVC-48749)

11. APAR-IY02254: If an endpoint label is already in use during an initial login, the endpoint manager no longer creates a unique default label by appending the endpoint’s object dispatcher number to the label.

   On an initial login, if the label is already in use, the variables, which contain information about the existing endpoint, have been added to the `allow_install_policy`. See the *Tivoli Management Framework Maintenance and Troubleshooting Guide, Version 3.7* for more information.

12. The Windows 95 endpoint resumes execution properly after the endpoint wakes up from suspend mode. Downcall execution is properly handled when the endpoint goes in and out of suspend mode.

13. The `wepmgr fsck` command can rewrite endpoints in the Tivoli name registry endpoint records from the `.bdb` files. This is a recovery convenience for those that have mismatches between the `.bdb` files and the Tivoli name registry.

14. Gateways can successfully upgrade endpoints released in Version 3.2 and Version 3.6 by running the `wadminep upgrade` command or the `login_policy` script.
New Features in Version 3.7B

15. In previous releases, endpoints that used dial-in access or Dynamic Host Configuration Protocol (DHCP) in which their IP addresses changed without restarting the system would lose communication with its assigned gateway. The `lcfd -D address_notif_interval` command supports these more dynamically changing IP addresses. See the *Tivoli Management Framework Reference Manual, Version 3.7* for more information.

Security Enhancements

1. APAR-IX79633: The Tivoli policy architecture and Tivoli policy method commands are improved. Also, stricter policy functionality has been added.

   Tivoli policy changes include the following:

   - Added the *policy* role.
   - Modified the access control lists for several methods to require the *policy* role.
   - Added the *policy* role wherever the *senior* role is present for all administrators in the local Tivoli management region and for all security groups.
   - Made specific role changes to the following commands: `wcrtp`, `winstruct`, `winstruct_plus`, `winstruct_task`, `wputpolm`, `wsetpr`, `waddpolm`, `wrmpolm`, and `wrunpolm`.

   These changes enable you to separate the authorization required to create profiles and change policy. By default, administrators can both create profiles and change policy. However, if you want to authorize an administrator to create profiles, but you do not want the administrator to be able to change policy, you can remove the *policy* role from the administrator.

   Patches provided with Version 3.6.1 allowed administrators to perform certain policy operations if they were granted the *policy* role. Root administrators had the ability to grant the *policy* role to themselves or to any administrators. In patches 3.6.1-TMF-0008, 3.6.1-TMF-0042, 3.6.1-TMF-0051, and Tivoli Management Framework, Version 3.6.2, the *policy* role was automatically granted to administrators who had the *senior* role. In pristine
installations of Version 3.7B, however, the policy role was no longer granted automatically to every administrator with the senior role.

See the Tivoli Management Framework Planning for Deployment Guide, Version 3.7 for more information about policy roles. (CMVC-42509, 95996)

2. APAR-IX83613, IY00675, IY00677: The endpoint manager performs the same checks that the object dispatcher does for method invocation. This change gives you more control over the administrative roles necessary to access or change specific endpoint characteristics.

Specific role changes have been made to the following commands: wep, wsub, wmv, and wdelep. See the Tivoli Management Framework Reference Manual, Version 3.7 for more information.

Compatibility and Interoperability

This section contains information about the compatibility and interoperability of Tivoli Management Framework.

The terms compatibility and interoperability are defined as follows:

Compatibility
Whether different versions of a Tivoli Enterprise product can communicate with different versions of Tivoli Management Framework.

Note: The compatibility of a Tivoli product with Tivoli Management Framework does not indicate that the Tivoli product also is compatible with new operating system releases supported by Tivoli Management Framework. See Tivoli Supported Platforms webpage at http://www.tivoli.com/Tivoli_Electronic_Support/ vcert.nsf/Page1 for information about which operating systems are supported by Tivoli products.

Interoperability
Whether different versions of the same Tivoli Enterprise product can communicate with each other.

Version 3.2 endpoint managers and gateways do not interoperate with Tivoli Management Framework, Version 3.7B. When you upgrade your Tivoli management region server to Version 3.7B, the endpoint manager is upgraded. Immediately after upgrading your server, Tivoli Systems strongly recommends that you upgrade your Version 3.2, 3.6.x, and 3.7 gateways, when possible. You can upgrade Version 3.2, 3.6.x, and 3.7 endpoints by using the `wadminep upgrade` command or by using a `login_policy` script to automatically upgrade endpoints the first time they log in to the Version 3.7B gateway. The following figure shows the interoperability combinations of Version 3.7B gateways and endpoints in a Tivoli management region:

<table>
<thead>
<tr>
<th>3.7B Tivoli Management Region Server</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.7B Gateway</strong></td>
</tr>
</tbody>
</table>

**Note:** Version 3.6.x endpoint methods can be downloaded and executed on Version 3.7B endpoints when a Tivoli management region has both Version 3.7B and 3.6.x gateways.

The following table shows the compatibility of Tivoli Management Framework, Version 3.7B, with the other Tivoli products:

<table>
<thead>
<tr>
<th>Tivoli Product</th>
<th>Compatibility with Tivoli Management Framework 3.7B?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tivoli Distributed Monitoring 3.0.2</td>
<td>No</td>
</tr>
<tr>
<td>Tivoli Distributed Monitoring 3.0.3</td>
<td>No</td>
</tr>
<tr>
<td>Tivoli Product</td>
<td>Compatibility with Tivoli Management Framework 3.7B?</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>Tivoli Distributed Monitoring 3.5</td>
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</tr>
<tr>
<td>Tivoli Distributed Monitoring 3.5.1</td>
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<tr>
<td>Tivoli Distributed Monitoring 3.5.2</td>
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</tr>
<tr>
<td>Tivoli Distributed Monitoring 3.6</td>
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</tr>
<tr>
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<tr>
<td>Tivoli Distributed Monitoring 3.6.2</td>
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</tr>
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<td>Tivoli Enterprise Console 2.6</td>
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<tr>
<td>Tivoli Enterprise Console 3.6</td>
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<td>Tivoli Enterprise Console 3.7</td>
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<td>Tivoli Inventory 3.0</td>
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<td>Tivoli Inventory 3.1</td>
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<tr>
<td>Tivoli Inventory 3.2</td>
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<td>Tivoli Inventory 3.6.2</td>
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</tr>
<tr>
<td>Tivoli Remote Control 2.0</td>
<td>No</td>
</tr>
</tbody>
</table>
## Compatibility and Interoperability

<table>
<thead>
<tr>
<th>Tivoli Product</th>
<th>Compatibility with Tivoli Management Framework 3.7B?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tivoli Remote Control 2.1</td>
<td>No</td>
</tr>
<tr>
<td>Tivoli Remote Control 2.1.1</td>
<td>No</td>
</tr>
<tr>
<td>Tivoli Remote Control 3.6</td>
<td>Yes</td>
</tr>
<tr>
<td>Tivoli Remote Control 3.6.1</td>
<td>Yes</td>
</tr>
<tr>
<td>Tivoli Remote Control 3.6.5</td>
<td>Yes</td>
</tr>
<tr>
<td>Tivoli Security Management 3.2</td>
<td>No</td>
</tr>
<tr>
<td>Tivoli Security Management 3.6</td>
<td>Yes</td>
</tr>
<tr>
<td>Tivoli Security Management 3.6.1</td>
<td>Yes</td>
</tr>
<tr>
<td>Tivoli Security Management 3.6.2</td>
<td>Yes</td>
</tr>
<tr>
<td>Tivoli Security Management 3.7</td>
<td>No</td>
</tr>
<tr>
<td>Tivoli Software Distribution 3.0</td>
<td>No</td>
</tr>
<tr>
<td>Tivoli Software Distribution 3.1</td>
<td>No</td>
</tr>
<tr>
<td>Tivoli Software Distribution 3.1.1</td>
<td>No</td>
</tr>
<tr>
<td>Tivoli Software Distribution 3.1.2</td>
<td>No</td>
</tr>
<tr>
<td>Tivoli Software Distribution 3.6</td>
<td>Yes</td>
</tr>
<tr>
<td>Tivoli Software Distribution 3.6.1</td>
<td>Yes</td>
</tr>
<tr>
<td>Tivoli Software Distribution 3.6.2</td>
<td>Yes</td>
</tr>
<tr>
<td>Tivoli Software Distribution 4.0</td>
<td>Yes</td>
</tr>
<tr>
<td>Tivoli Software Installation Service 1.0</td>
<td>No</td>
</tr>
</tbody>
</table>
Product Notes

Consider the following important information while using Tivoli Management Framework.

* —The asterisk symbol denotes product notes introduced between Tivoli Management Framework, Version 3.7 and Version 3.7B.
**Interpreter Types**

The following table lists the operating systems supported by Tivoli Management Framework. For each operating system, the table lists the resources you can create on that operating system and the interpreter type (interp) associated with that operating system and resource combination. The resources are Tivoli Management Region (TMR) server, managed node, gateway, endpoint, and PC agent. (Support for PC agents is being phased out starting with Version 3.7. Convert these systems to endpoints.)

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Interpreter Type</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generic</td>
<td>generic</td>
<td>All (3.6.x)</td>
</tr>
<tr>
<td>AIX V4</td>
<td>aix4-r1</td>
<td>TMR server, Managed node, Gateway, Endpoint (3.7B)</td>
</tr>
<tr>
<td>AS/400 Release V3R2M0</td>
<td>os400-v3r2</td>
<td>Endpoint (3.6.x)</td>
</tr>
<tr>
<td>AS/400 Release V3R7M0, V4R1M0, V4R2M0, V4R3M0, V4R4M0</td>
<td>os400-v3r7</td>
<td>Endpoint (3.7B)</td>
</tr>
<tr>
<td>AS/400 Release V4R3M0, V4R4M0, and later</td>
<td>os400</td>
<td>—</td>
</tr>
<tr>
<td>NetWare 3</td>
<td>nw3†</td>
<td>Endpoint (3.6.x)</td>
</tr>
</tbody>
</table>

---

- Not supported in this release.
- † In Tivoli Software Installation Service, you also can indicate either nw3 or nw4 as the interpreter type netware.
- ‡ Support for the PC agent is provided only for converting the PC agent to an endpoint.
<table>
<thead>
<tr>
<th>Operating System</th>
<th>Interpreter Type</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3.6.x</td>
</tr>
<tr>
<td>NetWare 4</td>
<td>nw4†</td>
<td>PC agent</td>
</tr>
<tr>
<td>NetWare 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nwr-ix86</td>
<td>—</td>
<td>Gateway</td>
</tr>
<tr>
<td>OS/2</td>
<td>os2</td>
<td>PC agent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>os2-ix86</td>
<td>Gateway</td>
</tr>
<tr>
<td>OS/390®</td>
<td>os390</td>
<td>TMR server</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Managed node</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gateway</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Endpoint</td>
</tr>
<tr>
<td>HP-UX 9</td>
<td>hpux9</td>
<td>TMR server</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Managed node</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gateway</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Endpoint</td>
</tr>
<tr>
<td>HP-UX 10</td>
<td>hpux10</td>
<td>TMR server</td>
</tr>
<tr>
<td>HP-UX 11</td>
<td></td>
<td>Managed node</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gateway</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Endpoint</td>
</tr>
<tr>
<td>SunOS</td>
<td>sunos4</td>
<td>TMR server</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Managed node</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gateway</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Endpoint</td>
</tr>
</tbody>
</table>

— Not supported in this release.
† In Tivoli Software Installation Service, you also can indicate either nw3 or nw4 as the interpreter type netware.
‡ Support for the PC agent is provided only for converting the PC agent to an endpoint.
If your Tivoli Management Region contains tier 2 operating systems, you might encounter the interpreter types listed in the following table. This is not a comprehensive list of tier 2 operating systems. To determine whether an unlisted operating system is supported, contact your Tivoli support provider.

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Interpreter Type</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3.6.x</td>
</tr>
<tr>
<td>Solaris</td>
<td>solaris2</td>
<td>TMR server</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Managed node</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gateway</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Endpoint</td>
</tr>
<tr>
<td>Windows 2000</td>
<td>w32-ix86</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows 3.x</td>
<td>win3x</td>
<td>PC agent</td>
</tr>
<tr>
<td>Windows 95</td>
<td>win95</td>
<td>PC agent</td>
</tr>
<tr>
<td>Windows 98</td>
<td></td>
<td>Endpoint</td>
</tr>
<tr>
<td>Windows NT</td>
<td>nt</td>
<td>PC agent</td>
</tr>
<tr>
<td></td>
<td>w32-ix86</td>
<td>TMR server</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Managed node</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gateway</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Endpoint</td>
</tr>
</tbody>
</table>

— Not supported in this release.
† In Tivoli Software Installation Service, you also can indicate either nw3 or nw4 as the interpreter type netware.
‡ Support for the PC agent is provided only for converting the PC agent to an endpoint.
The receiving and rejected distribution states are not used in this release.

OS/2 and NetWare Gateways

Tivoli Management Framework provides standalone gateways, meaning that they cannot be considered as managed nodes. These gateways are available on OS/2 and NetWare systems. In general, they provide the same functionality of other gateways:

- Endpoint login and communication

<table>
<thead>
<tr>
<th>Interpreter Type</th>
<th>Operating System and Hardware</th>
</tr>
</thead>
<tbody>
<tr>
<td>dgux5-ix86</td>
<td>DG Aviion / Intel®</td>
</tr>
<tr>
<td>linux-ix86</td>
<td>Red Hat Linux Versions 6.0 and 6.1 on Intel 486 and Pentium® hardware</td>
</tr>
<tr>
<td>mips-irix5</td>
<td>SGI Mips IRIX 5</td>
</tr>
<tr>
<td>mips-reliant</td>
<td>Pyramid MIServer ES</td>
</tr>
<tr>
<td>nextstep-ix86</td>
<td>i486 / NEXTSTEP</td>
</tr>
<tr>
<td>osf-axp</td>
<td>Tru64 UNIX® (Compaq Alpha / OSF1)</td>
</tr>
<tr>
<td>reliant-unix</td>
<td>Pyramid/SNI Reliant UNIX</td>
</tr>
<tr>
<td>sequent</td>
<td>Sequent/Dynix/ptx</td>
</tr>
<tr>
<td>solaris-ix86</td>
<td>Solaris on Intel</td>
</tr>
<tr>
<td>sysv4-att</td>
<td>AT&amp;T 3000 / SVR4</td>
</tr>
<tr>
<td>sysv4-m88k</td>
<td>Motorola 88k / SVR4</td>
</tr>
<tr>
<td>uw2-ix86</td>
<td>i486 / UnixWare</td>
</tr>
<tr>
<td>u6000_svr4mp</td>
<td>Unisys / SVR4MP</td>
</tr>
</tbody>
</table>

MDist 2

The receiving and rejected distribution states are not used in this release.
Invocation of methods to be run on the endpoint and gateway

The NetWare gateway does appear as a managed node when you perform the `wlookup` command.

Gateway implementations vary by operating system.

The following table indicates supported and unsupported functions for the OS/2 and NetWare gateways:

<table>
<thead>
<tr>
<th>Gateway or Application Function</th>
<th>OS/2</th>
<th>NetWare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphical user interface (GUI) binaries can be installed on the gateway</td>
<td>Supported (available when using Tivoli Desktop for Windows)</td>
<td>Not supported</td>
</tr>
<tr>
<td>Tivoli desktop on a client can connect to the gateway for GUI support</td>
<td>Supported (available when using Tivoli Desktop for Windows)</td>
<td>Not supported</td>
</tr>
<tr>
<td>Tivoli desktop can run on the gateway system</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Gateway creation</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>The gateway part of management applications can be installed</td>
<td>Not supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Tivoli Management Framework gateway method (provides gateway functionality)</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>Tivoli Distributed Monitoring gateway method (provides gateway functionality)</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Gateway or Application Function</td>
<td>OS/2</td>
<td>NetWare</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------------------</td>
<td>-----------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Tivoli Enterprise Console gateway method (provides gateway functionality)</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Tivoli Inventory MCollect gateway method</td>
<td>Not supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Can be configured to serve as MDist repeater</td>
<td>Not supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Can be configured as RIM host</td>
<td>Not supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Can be used as a Tivoli Software Distribution source host</td>
<td>Supported (command line interface [CLI] is not supported)</td>
<td>Not supported</td>
</tr>
<tr>
<td>Tivoli Distributed Monitoring Application Response Measurement (ARM) server</td>
<td>Not supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Tivoli Remote Control Version 2.1 gateway method (provides gateway functionality)</td>
<td>Not supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Encryption levels of none, simple, and DES</td>
<td>Supported (all levels)</td>
<td>Supported (all levels)</td>
</tr>
<tr>
<td>Kerberos</td>
<td>Not supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Serve as a proxy system for a NetWare managed site</td>
<td>Not supported</td>
<td>Not supported</td>
</tr>
</tbody>
</table>
### PC Agents and PC Managed Nodes

Support for PC agents and PC managed nodes is being phased out. Convert all PC managed nodes to endpoints as soon as possible. See the *Tivoli Enterprise Installation Guide, Version 3.7* for the migration procedure.

<table>
<thead>
<tr>
<th>Gateway or Application Function</th>
<th>OS/2</th>
<th>NetWare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serve as a proxy system for a PC managed node</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Resource type for managed resources and appearance on Tivoli management region server GUI</td>
<td>Will appear as ManagedNode – Managed_Node</td>
<td>Will appear as ManagedNode – Managed_Node</td>
</tr>
<tr>
<td>Gateway icon</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>Gateway pop-up menu functions</td>
<td>Partly supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Configuration management (profiles)</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Notices</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Task library, tasks, and jobs</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Scheduler</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Spider HTTP function</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>rconnect—Tivoli Management Framework function</td>
<td>Supported (secure rconnect added in this release not supported)</td>
<td>Not supported</td>
</tr>
</tbody>
</table>
Defects Fixed in Version 3.7B

Windows 2000

Product notes include the following:

- To maintain the same directory permissions that are allowed in Windows NT, the `tmersrvd` account (the Tivoli unprivileged operations account) is added automatically to the **Power Users** group during installation on a Windows 2000 system.

You do not have to perform this action manually when deploying Tivoli Management Framework, Version 3.7B on a Windows 2000 system.

- When a Windows 2000 server is configured to be a domain controller, the **Power Users** group does not exist. The installation neither fails nor adds `tmersrvd` to an alternate group.

If you want to manage Tivoli management regions and managed nodes on Windows NT or Windows 2000 domain controllers, it is recommended that you manage them as endpoints. If you install applications with high resource requirements on Windows NT or Windows 2000 domain controllers, you must either give `tmersrvd` explicit read and execute permissions to certain directories or add `tmersrvd` to the Server Operators or Account Operators groups for equivalent Windows NT permissions.

Defects Fixed in Version 3.7B

The following sections list the major, reported defects that have been fixed since Version 3.6 and that are included in Version 3.7B.

> *—The asterisk symbol denotes defects fixed between Tivoli Management Framework, Version 3.7 and Version 3.7B.

**General**

1. APAR-IX71587: The `wchkdb` command `–i` option no longer fails to read from standard input. (CMVC-29562)
Defects Fixed in Version 3.7B

2. APAR-IX76134: The wls, wcd, wln commands, or other library routines can now access resources that contain slashes (/) in their names. (CMVC-36271, 86014)

3. APAR-IX79790: The oserv no longer terminates unexpectedly when the system is under a heavy load, such as when running the wchkdb command against interconnected regions, executing a job on all managed nodes from the Tivoli management region server, or distributing a Tivoli Enterprise Console adapter to all managed nodes from the Tivoli management region server. (CMVC-42783)

4. APAR-IX80525: While running the wbkupdb command, an accurate error message is displayed when the system date is very different from the last database dates and the backup fails. (CMVC-43985)

5. APAR-IX80595: The output from the wtailnotif and wlsnotif commands no longer includes the notice ID number of the notices. (CMVC-72908)

6. APAR-IX81221: The wmemsize command returns the correct value for systems with more than 128 MB of memory. (CMVC-45106)

7. APAR-IX81529: The commands that require query_view, query_execute, and query_edit roles no longer require the admin role in the Tivoli management region. (CMVC-61689)

8. APAR-IX82513: Error messages for the wtrace command are correctly returned to standard error.

9. APAR-IX83265: The Browse Scheduled Jobs dialog can now be used to display more than 200 scheduled jobs.

10. APAR-IX84022: You no longer receive an error message when you use the HTTP daemon to access Web pages on the Tivoli Enterprise Console server from the Tivoli management region server and vice versa. (CMVC-63176)

11. APAR-IX84063: The object dispatcher on Windows NT systems starts even when the Tivoli remote access account password is incorrect. (CMVC-85655)

12. *—APAR-IX86645: An extra icon no longer appears when using drag and drop to move a subscriber from one dataless profile
manager to another.

13. APAR-IX87238: Error logging was modified so that an error message no longer appears in the oservlog unless the retry count limit is exceeded. (CMVC-41990)

14. APAR-IX88506: Subscribing an endpoint to a profile manager does not require the global senior role. (CMVC-52869)

15. APAR-IY00672: The waddicon command works correctly on Windows 95 systems.

16. APAR-IY05967: The ntfsinfo.exe file returns accurate values for systems with large hard drives.

17. APAR-IY07070: The configuration and change management system (CCMS) was modified to correctly reflect actions and resolve problems associated with patch 3.6.1-ADM-0016.

18. APAR-IY07163: A new line character is no longer appended to the $location option when used in a policy or action script.

19. APAR-IY08112: The Tivoli Remote Execution Service process removes the triperr and tripout pipes that it creates.

20. APAR-IY08556: On NetWare, the addadmin command now accepts context names that are longer than 25 characters.

21. *—APAR-IY11454: A profile manager can now be opened when there are down subscribers.

22. *—APAR-IY13741: In Tivoli Management Framework Release Notes, Version 3.7, the allow_install_policy script incorrectly states LCF_DUPL_ADDRESS instead of the LCF_DUPL_NET_ADDRESS environment variable. The corrected script is shown on page 42.

23. It is not necessary for a script to have `#!/bin/sh` as the first line to run in the bash shell. (CMVC-62015)

24. All Tivoli error messages are prepended with the message catalog name and message key number. Use this name and key number to locate information about error messages in new documentation on the Tivoli Customer Support site. (CMVC-67269)

25. Uninstalling and reinstalling a Tivoli application that performs
Defects Fixed in Version 3.7B

endpoint upcalls no longer fails.

Note: Restart the gateway after the application is reinstalled.

Administrators

1. APAR-IX73497: Administrators can be modified or deleted when their only login was on a managed node that was deleted. (CMVC-32371)

2. APAR-IX78116: To add an account name that includes spaces using the *widmap* command, enclose the name in quotation marks (" "). The following example adds a *w32-ix86* entry to the *$my_group* map that resolves to *Domain Users*:
   
   ```
   widmap add_entry my_group w32-ix86 "Domain Users"
   ```
   (CMVC-39257)

Endpoints and Gateways

1. APAR-IX82294: After rebooting a Windows 95 endpoint, the Tivoli icon in the taskbar displays statistics when accessed. (CMVC-44800, 48755, 52813)

2. APAR-IX83802: Endpoints can log in to gateways across region boundaries. (CMVC-26857)

3. APAR-IX85004: The *lcfd.log* console message was updated.

4. APAR-IX85879: The endpoint manager includes unavailable gateways in the list of login interfaces passed back to the endpoint during initial and isolated logins.

5. APAR-IX87216: Endpoint upgrades no longer fail because the *TivoliAP.dll* file is copied to an incorrect directory.

6. APAR-IX87685: The *wep migrate* command sets a return code of 1 if the command fails.

7. APAR-IX88465: Deleted endpoints no longer appear as subscribers to profile managers or scheduled jobs.
8. APAR-IY00829: The `select_gateway_policy` script is not called with NULL options during a migration using a migratory login or migratory upcall.

9. —APAR-IY01218: Gateways correctly handle unconfigured interfaces on endpoints, which resolves the problem caused when the endpoint tries to contact other gateways.

10. APAR-IY01247, IY04037: Software distribution to endpoints no longer fails because of permissions for the directory holding the `TivoliAP.dll` file.

11. APAR-IY01990: The `startlcf.exe` command includes a `–H` option, which hides the endpoint daemon.

12. APAR-IY02036: When you delete a gateway, the gateway database and log files are removed.

13. APAR-IY02081: After migrating an endpoint from one gateway to another, the gateway alias list is updated to have at least the same value as the local interface through which it is connected.

14. APAR-IY02278: When you change an endpoint label, the old name is removed from the `Tivoli Management Agent Statistics` list.

15. APAR-IY02845: The `wep` command returns a meaningful error message when unable to execute a specified action rather than returning a usage statement.

16. APAR-IY03773: The `lcfd` command includes a `–D` option, which enables a change in paths for `load_dir` and `lib_path`.

17. —APAR-IY05304: Broken http requests no longer result in an object dispatcher segmentation violation.

18. —APAR-IY05767: A new `last.cfg` variable called `start_delay` was added to the Windows gateway and endpoint login. Use this variable to delay the `lcfd` from starting up for a specific amount of time. If an endpoint resides on the same system as its assigned gateway, use this variable to delay the `lcfd` startup so that it does not fail to log in after a reboot of the system. The value is specified in seconds.

19. —APAR-IY11276: Endpoints with multiple interfaces,
Defects Fixed in Version 3.7B

gateways, or both in their login interfaces list can send packets in excess of 4096 bytes.

20. *—APAR-IY11388: Subscribing endpoints across region boundaries no longer causes the endpoint manager to terminate unexpectedly. (CMVC-100137)

21. The Edit button on the Gateway List dialog is enabled. (CMVC-27074)

22. After the IP address of an endpoint is dynamically updated, the modified IP address does not cause downcall failures. (CMVC-43838)

23. The wcrtgate command was modified so that you cannot create gateways within the reserved port range. The reserved port range is less than 1024 and greater than 65535. (CMVC-50293)

24. The OS/2 endpoint icon is added to the startup folder and the endpoint starts automatically after a reboot. (CMVC-61097)

Internationalization

1. APAR-IX83120: When using a Japanese locale, the characters are no longer garbled when you select the Save button on the Notice Group Messages dialog.

2. *—APAR-IY01307: Upgrading to Version 3.7B no longer causes corruption of Norwegian and French characters when using Tivoli User Administration functions.

3. APAR-IY03512: On Solaris systems running Tivoli Distributed Monitoring, the date appears correctly in notices data.

4. The Tivoli Desktop for Windows login dialog is translated. (CMVC-23733)

5. The date format is appropriate for the locale. (CMVC-35723, 36576)

6. On UNIX, job creation no longer fails if the LANG environment variable for the oserv command is set to a value not supported by the operating system. (CMVC-36621)

7. Non-English profile manager names are supported.
8. The problem with the file browser occasionally failing to navigate through non-English directories is fixed. (CMVC-40887)
9. The `wgettrim` command is correctly internationalized. (CMVC-54575)

### Multiplexed Distribution

1. APAR-IX81261: MDist errors are written to the `mdist.log` file instead of the Distribution Status console. (CMVC-45145)
2. APAR-IX81511: When distributing a file to a managed node and that file is locked, the locked file is renamed to `#filename.1` unless it is not locked. If locked, the decimal digit is incremented until an unlocked file name is detected. (CMVC-47014)
3. APAR-IX82197: The `wchkdb` command no longer removes MDist repeaters from managed nodes that are down.
4. APAR-IX84249: MDist routing uses the source repeater when creating distribution paths for more efficient distributions.
5. APAR-IX84256: Distributions to Windows NT systems no longer hang if the distribution has insufficient permission to write to the destination directory. Instead, messages are written to the distribution log file stating that the installation failed.
6. APAR-IX87674: File package distributions from a Windows NT repeater to a Windows NT managed node are no longer relatively slower than distributions on other operating systems. (CMVC-53675)
7. APAR-IY00678: Running the `wrpt` command with a negative value for the `net_load` option works correctly.
8. APAR-IY01188: Error messages for the `wrpt` command are more user friendly.
9. APAR-IY03711: The `wrpt` command with the `-q` option no longer hangs when one managed node is in the same range of another managed node.
10. APAR-IY06979: Running the `wrpt` command with the `-L` option
Defects Fixed in Version 3.7B

during distributions no longer causes the gateway to terminate unexpectedly.

11. *—APAR IY13045: Checkpoint restart to a Windows NT repeater no longer fails. (CMVC-99598)

12. MDist no longer causes locks to be held on the name registry during distributions. Therefore, transactions such as creating an endpoint can occur while a distribution is in progress. (CMVC-42798, 49138)

13. *—MDist 2 throughput on OS/2 gateways is no longer impacted to comply with the net_load setting. The waits that occur to keep bandwidth usage under net_load should typically be sub-second, but observed waits are 10 to 20 seconds. This no longer results in long distribution times. (CMVC-99503)

Policy Regions

1. APAR-IX77628: The wdelpr command no longer gives an erroneous error message when deleting a policy region that contains objects. (CMVC-38358)

2. APAR-IX84123: The wrm command completely removes endpoints from policy regions.

3. APAR-IX88544: Creating a managed node in a policy region no longer fails if the administrator does not have the super or install_client role in the region.

4. APAR-IY03220: You can rename policy regions that contain endpoints.

5. APAR-IY04665: The wcrtpr and wsetpr commands no longer fail when invoked from endpoint manager and gateway policy scripts.

RIM

The RDBMS Interface Module (RIM) correctly inserts data from Tivoli Inventory scans of NetWare servers into Informix. (CMVC-84150)
Defects Fixed in Version 3.7B

Security and Authentication

1. APAR-IX82265: Tivoli Authentication Package no longer causes the Windows NT LSASS process to lock up the system.

2. APAR-IX85078: Failing to specify the region password when changing the IP address of a Tivoli management region server using the odadmin region change_region command no longer corrupts the odlist.dat file.

3. APAR-IX86013: The HTTP password is encrypted between the Tivoli management region server and gateway.

Task Library

1. APAR-IX62022: The wtll import command no longer fails when importing a task whose name has spaces embedded in it. If the name has embedded spaces, enclose it in double quotation marks. (CMVC-15339)

2. APAR-IX72249: On Windows NT systems, odadmin set_port_range no longer causes problems with the werttask command. (CMVC-30583)

3. APAR-IX76153: The ArgLayout program field is able to accept files external to Tivoli Management Framework. (CMVC-36273)

4. APAR-IX79157: Using the wdel command to delete a job no longer corrupts the task library. (CMVC-41539)

5. APAR-IX81693: The execution window stays open when an error occurs while running a task. (CMVC-47844)

6. APAR-IX84234, IY00597: Administrators having the admin role for a region can execute tasks on endpoints.

7. APAR-IX85707: Only administrators with the senior role can delete task libraries.

8. APAR-IX85735: Options are correctly passed to a NetWare task when running an ncf script as an endpoint task from the desktop or when using the wruntask command. (CMVC-85182)
Defects Fixed in Version 3.7B

9. APAR-IX89516: Scripts that were created on Windows NT systems and that have carriage returns or line feeds as line terminators can run on Windows NT and UNIX systems.

10. APAR-IY02415: It is possible to select more than one profile manager in the Create Job dialog.

11. Tasks that are set to run under a virtual group ID, such as the $root_group login map, execute successfully on managed nodes. (CMVC-43130, 44679)

12. Batch tasks (.bat) on Windows 95 and Windows 98 endpoints return nonzero exit codes. Therefore, when scripts fail, they accurately return a nonzero code. (CMVC-44262)

Tivoli Desktop

1. APAR-IX66786: Global roles are no longer required to log in with Tivoli Desktop for Windows. (CMVC-21870)

2. APAR-IX73274: Pressing the Ctrl key while selecting an item with the mouse in the Tivoli Desktop for Windows functions correctly. (CMVC-32030)

3. APAR-IX74947: AutoPacks correctly repopulate on the navigator after using the wnavpop command. (CMVC-34657)

4. APAR-IX81378: The icon for a NetWare managed site using IP communication displays the list of NetWare-managed NetWare sites in the region. (CMVC-46372)

5. APAR-IX85423: The desktop displays previews of file package distributions that are longer than 350 lines. While using the Tivoli desktop, selecting View→Refresh can cause icon corruption. (CMVC-106791)

6. *—APAR IY12809: Version 3.7 of the Tivoli desktop no longer crashes when it is used repeatedly to create managed nodes on Windows 2000 systems. (CMVC-10128)
Known Product Defects, Limitations, and Workarounds

This section lists current defects and limitations for Tivoli Management Framework, Version 3.7B. A workaround, if known, is also described.

* —The asterisk symbol denotes known product defects found between Tivoli Management Framework, Version 3.7 and Version 3.7B.

**General**

1. APAR-IX84751: On UNIX, the /tmp/.tivoli directory, which constrains users from deleting files in that directory, does not handle its permissions correctly. The sticky bit is set correctly, but permissions on the socket are still set so that non-root administrators can delete files in the directory. If a file is deleted, stop the oserv process and restart it. (CMVC-89409)

2. If a trusted host interregion connection fails, the remote_connect_undo method fails, because it attempts a root-password (rexec-based) connection to the remote region. (CMVC-8687)

3. The kernel configuration limit for the maximum number of processes per user on AIX 4.x systems is 40. The oserv can handle up to 200 concurrent threads, with each possibly running a separate process. This can result in fork failures. (CMVC-39862)

**Workaround:** To ensure that the oserv has enough processes to function correctly, set a larger number of processes for the system (100 to 150). Perform the following procedure:

a. Open a terminal window and enter the smitty command.

b. Choose the System Environments option to open the Change/Show Characteristics of Operating System panel.

c. Change the Maximum number of processes allowed per user from the default value of 40 to 150.

4. If an administrator without the global super or senior role tries to reexecute the oserv, the command fails without displaying an error.
Known Product Defects, Limitations, and Workarounds

message and returns a return code of 0. (CMVC-84174)

5. The estimate backup size method is not implemented for NetWare gateways. An attempt to estimate the size generates the requested resource not found error message. The backup completes successfully, but without estimating the size. (CMVC-94517, 96434)

**Workaround**: Backup scripts should exclude NetWare gateways.

6. In the Tivoli Desktop for Administrator window, if you do not enter a value in the field when trying to connect to a remote server, a General Failure window is displayed instead of the error message Error: You must enter a value for the following fields: Connect to Remote. (CMVC-95632)

7. In the Disconnect from a Remote TMR window, when you select a remote connection and click the browser icon, the Search All button is not active. (CMVC-99297)

8. *—If you use Tivoli Software Installation Service (SIS) to install Tivoli Management Framework on an OS/2 managed node, you must first install patch 3.7-SIS-0001 on the system where SIS will be run. If patch 3.7-SIS-0001 is not installed, the installation of patch 3.7-TMF-0002 with SIS does not complete normally and certain database updates are not completed on the OS/2 managed node.

Installing patch 3.7-TMF-0002 with SIS results in warning messages about soft errors in certain file packages. These warning messages do not indicate a failure in the OS/2 installation, but do cause SIS to report failure when the installation is complete. This is expected because SIS always displays this message when there are warnings during an installation.

Attempting to install or use a Version 3.6.1 or 3.6.2 application on Version 3.7B, which creates a task for os400-v3r2 interp using the werrtask command, fails because the os400-v3r2 interp was removed.

**Workaround**: To resolve this problem, enter the following command:
known product defects, limitations, and workarounds

idc all `wlookup installation` add_platform "ibm as/400 / os/400 v3r2" "os400-v3r2" TRUE

(CMVC - 100327)

Documentation

1. APAR-IY00557: In the Tivoli Management Framework Planning for Deployment Guide, Version 3.7, the “Authorization Roles” appendix does not list all the roles required to perform specified activities.

2. APAR-IY11428: In the Tivoli Management Framework Reference Manual, Version 3.7, the synopsis for the pm_val_remove_subscribers task library policy method is incorrect. The correct synopsis is as follows:

   pm_val_remove_subscribers action mgr_name subscriber

3. For gateways that support IPX, gateway information can be viewed from a Web browser. To view this gateway information, enter the following URL in the Location text box:

   http://hostname:port_number

   From this browser, you can accomplish a variety of tasks that include the following:

   ▪ View an endpoint’s protocol
   ▪ Search for an endpoint
   ▪ View gateways
   ▪ Choose an endpoint

   (CMVC-94890)
4. The allow_install_policy script in the Tivoli Management Framework Reference Manual, Version 3.7 is not up-to-date. The following is the new default allow_install_policy script:

```bash
#!/bin/sh
# Please do not remove the below Tivoli comments
# --- Start of Tivoli comments ---
#
# The following are the command line options passed to this
# script from the Endpoint Manager.
#
# $1 - The label of the endpoint machine
# $2 - The object reference of the endpoint machine
# $3 - The architecture type of the endpoint machine
# $4 - The object reference of the gateway that the endpoint
#      logged into
# $5 - The ip/ipx address of the endpoint logging in (refer
#      to parameter
# $10 to determine the protocol of the endpoint).
# $6 - region
# $7 - dispatcher
# $8 - version
# $9 - The inventory id of the endpoint logging in.
#
# The following command line option will be passed to
# this script from the Endpoint Manager, when compiled with
# the MULTIPROTO flag turned on
#
# $10 - The protocol of the endpoint logging in.
# TCP/IP -> TCP/IP
# IPX -> IPX/SPX
#
# The normal exit code of 0 from the allow_install_policy
# will enable the endpoint's initial login to proceed.
# (If the label of this endpoint is in use, though,
# this login won't complete.)
#
# An exit code of 10 also will enable this login to
# proceed and, if this endpoint's label matches the
# label of an existing endpoint, a unique label will
# be created for this endpoint.
#
# An exit code of 6 will cause this login to be ignored.
#
# Exiting the allow_install_policy with any other
# non-zero exit status will stop this endpoint's
# initial (or orphaned) login.
#
# The environment variable LCF_LOGIN_STATUS is also set
# by the epmgr.
```
A value of 2 indicates the endpoint is isolated. That is, it was unable to contact its assigned gateway. Isolated endpoints are automatically migrated to another gateway unless the select_gateway_policy terminates with a non-zero exit status. Other LCF_LOGIN_STATUS values are:

- 0 Initial login (allow_install_policy, select_gateway_policy, after_install_policy)
- 2 Isolated login (select_gateway_policy)
- 3 Migratory login (select_gateway_policy)
- 7 Orphaned login (allow_install_policy, select_gateway_policy, after_install_policy)

The allow_install_policy will have these environment variables set if there is already an existing endpoint with the same label as the endpoint which is attempting to login:

- LCF_DUPL_OBJECT object id of existing endpoint
- LCF_DUPL_NET_ADDRESS network address of existing endpoint
- LCF_DUPL_LOGIN timestamp of existing endpoint's first normal login
- LCF_DUPL_GATEWAY object id of existing endpoint's gateway
- LCF_DUPL_INV_ID inventory id of existing endpoint
- LCF_DUPL_INTERP interp (architecture type) of existing endpoint

The initial login will fail for an endpoint whose label matches the label of an existing endpoint, unless allow_install_policy is exited with code 10.

Also note that during the execution of allow_install and select_gateway policy scripts, the endpoint does not yet formally exist. For this reason, the endpoint object reference will have a value of OBJECT_NIL and the object dispatcher number will be 0. The endpoint label will have the value suggested by the endpoint (or the user value lcfd -n) but is not guaranteed to become the final endpoint label. It will become the final endpoint label if this value is not already taken by another endpoint.

--- End of Tivoli comments ---

exit 0


6. The Tivoli Enterprise Installation Guide, Version 3.7 incorrectly states that the mdist_ms_sql_admin.sql scripts are installed in the
$BINDIR/../generic/MDIST/SCRIPTS/RDMBS directory instead of the $BINDIR/TME/MDIST2/sql directory. In addition, both the default database name and password are mdstatus.

Endpoints and Gateways

1. APAR-IY09973: If an administrator with the global senior role runs the wepmgr stop command, that administrator is not able to run the wepmgr start command. An error message is displayed stating that the administrator is not authorized to run the command. (CMVC-84402)

2. Double quotation marks are ignored for gateway labels. For example, if a label syrinx"-gateway is specified, the actual label would be syrinx-gateway. (CMVC-83574)

3. If you start or stop a UNIX endpoint with the lcfd.sh script, the xterm used to run the command is closed after the command successfully runs. (CMVC-83816)

4. The “Endpoint is not serviced by Gateway” error message is generated during an endpoint migration when the receiving gateway fails or is unavailable.
   
   **Workaround:** Shut down and restart the target gateway to refresh its copy of the EPMGR database. (CMVC-83857)

5. If an administrator with a user role attempts to perform the wep view command, the command returns an error message and a return code of 1. (CMVC-84181)

6. The wdelgate command cannot be performed if the status of the gateway is D. In this case, the object dispatcher is not active; thus, the local database is not accessible. (CMVC-93542)
   
   **Workaround:** Reactivate the object dispatcher before issuing this command.

7. For shell scripts to run on Windows NT endpoints, you must place a dependency on sh.exe on the run_task method of the TaskEndpoint object. The dependency causes sh.exe to be downloaded when a task is run on a Windows NT endpoint, if it is not already there.
Follow these steps to define the dependency:

a. Get the object ID (OID) of the current dependency set (if any) associated with the run_task method:

   wchdep -g Classes:TaskEndpoint run_task

b. Create the dependency:

   wdepset -c task-library-tool-base \\
   -a w32-ix86 bin/w32-ix86/tools/sh.exe +a +p %TOOLS% \\
   -a w32-ix86 bin/w32-ix86/tools/win32gnu.dll +a +p \\
   %TOOLS%

   If there is not an existing dependency set, associate the dependency with the run_task method on the TaskEndpoint object:

   wchdep @Classes:TaskEndpoint \\
   @DependencyMgr:task-library-tool-base run_task

   If there is an existing dependency set, add a nested dependency set to the existing dependency set:

   wdepset -e <current_depset_OID> \\
   -a depset @DependencyMgr:task-library-tool-base

d. Synchronize the gateway’s method cache with the Tivoli management region server database:

   wgateway gateway dbcheck

   where gateway is the name of your gateway.

Complete these steps for each gateway.

8. Software distributions to an endpoint running a sentry_engine that has been migrated to an AIX gateway do not complete.

   Workaround: Stop and restart the endpoint. (CMVC-100327)

**Internationalization**

**Note:** The following defects apply to all translations of Tivoli Management Framework unless otherwise specified.

1. APAR-IX83065: On OS/2 systems, the desktop hangs and does not open if sLanguage=esp is specified in the win.ini file.

   Workaround: Comment out this line.
2. APAR-IY04143: The –R option of the wschedjob command fails with a usage statement if the unit of measure is not specified in the local language. For example, if the local language is Japanese, LANG must equal JA_JP.

3. Help message dialogs sometimes wrap text incorrectly. (CMVC-27063)

4. Some text in the desktop is not translated. (CMVC-30730, 36047, 36048, 37644, 39326, 40618, 42131, 42159)

5. On Windows NT systems, non-English input is not fully supported for bash.exe, sh.exe, echo, and other shell utilities. (CMVC-35329)

6. A file package distribution log from clients that use a different code set than the server does not appear correctly when saved to a file. (CMVC-35958)

7. In some cases, English text, resource names, resource types, and roles are not fully translated. (CMVC-36032, 36037, 94736, 94996, 95188, 95225, 95295, 95344, 95348, 95416, 95574, 95588, 95652, 95723, 95772, 95780, 95782, 95811, 95816, 96256, 96553, 96612, 96702, 97975)

8. Manual pages on all systems and help files (.hlp) on Windows NT systems are not translated. (CMVC-36990)

9. Non-English double-byte character set (DBCS) host names and labels are not supported. (CMVC-37400, 37471, 37564, 37946, 40125, 41920)

10. The widmap command does not support non-English map names. (CMVC-37493)

11. On Windows NT systems, empty profile or other tables might have left-justified column header strings that cannot be read. Headers display correctly after a row of data is entered. (CMVC-37650, 37729)

12. The wsmpset command displays non-English strings incorrectly. (CMVC-37728)
13. On Solaris systems, the system crashes if `LANG` is set to an unsupported value and the following command is issued:

   `wcatcher -d dir_name -a`

   (CMVC-38456)

14. The check policy log file is not created in Korean environments.
   (CMVC-39070)

15. Some command line and keyword options are not translated. This avoids programming complexities when writing scripts that can run under multiple locales. Scripts should run under the locale in which the data being retrieved is stored. (CMVC-41179)

16. On UNIX systems, the `setup_env.sh` file does not set `X11/app-defaults` correctly when `LANG` is defined.
   (CMVC-42422)

17. When query results contain DBCS characters and are exported to a file, the DBCS characters are corrupted and display unreadable characters. (CMVC-42594)

18. The output file created by the scheduler will contain corrupted job and schedule names if the name contains extended characters. (CMVC-50157)

19. The Web status page for endpoints appears only in English.
   (CMVC-53415)

20. The usage statement for some commands are not fully translated.
   (CMVC-53923, 53943, 53967, 54242, 54287, 54297, 54395, 54538, 54633, 54636, 54637, 54644, 54645, 54646, 54649, 95496, 95546, 95547, 95779, 95884, 96002, 96125, 96182, 96228, 96617, 96274, 97750, 98341, 98342, 98343, 95884)

21. The `odadmin` command expects translated equivalents of the TRUE and FALSE keywords in non-English locales.
   (CMVC-85311)

   **Workaround:** Use the local equivalents for TRUE and FALSE.

22. In Korean environments, the `lcfd.log` file dates contain a mixture of English and Korean characters in the time and date fields.
   (CMVC-85781)
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23. The NetWare gateway Web page is not translated. (CMVC-87075)

24. Saving job output can result in corrupted files on DBCS systems. (CMVC-91719)

   **Workaround**: When creating the job, select the **Save output to file** option, instead of saving the output when reviewing job completion.

25. For Korean, Japanese, Simplified Chinese, and Traditional Chinese, the mnemonic keys do not work. (CMVC-94702, 95421, 95498, 95775, 95815)

26. When editing an entry in the Address Book Profile window, the text appears in English. (CMVC-95574)

27. The **Help** button is missing on the Estimate Backup Size window. (CMVC-95601)

28. English catalog file AmsCatalog (key 29) refers to the operating system Windows 97. English catalog file AmsCatalog (key 30) refers to the operating system Windows NT 7.0. These operating systems do not exist. (CMVC-97213)

29. References to book titles and product names might be out of date. Refer to the current set of documentation or contact your customer support provider for more information. (CMVC-97459)

30. The User Link HTML page is in English. (CMVC-97676)

31. In the Tivoli Distribution Status console, the Color Palette window is not translated. (CMVC-98326)

32. A Tivoli management region might not fully support operating in more than one language.

33. When used with Japanese language modules, the Userlink Status dialog displays garbled fields for **Status**, **Progress Status**, and **Time Left**.

**Multiplexed Distribution**

1. APAR-IX81177, IX83165: During a distribution, an error message might be displayed stating `ipc_recv failed: connection reset by peer.` (CMVC-45057)
2. APAR-IY06949: While performing several multiple distributions with the gateway’s debug log level set to 8 or greater, the gateway might crash while checking its cache for an endpoint method binary. The gatelog ends with either a “hit key” or “miss key” line similar to one of the following:

```
2000/06/24 11:17:36 +06: gwcache: hit
type=<1952926625.1.519,.inh.,>
```

```
2000/06/24 11:17:36 +06: gwcache: miss
type=<1952926625.1.518,.meth.,mftp_receive_data>
```

(CMVC-98155)

**Workaround:** Set the gatelog to 7 or less while performing multiple, simultaneous distributions.

3. When a repeater is misconfigured, an error message might be returned and the distribution might fail for all subscribers, even if only one subscriber is misconfigured. The following error message is displayed:

```
<UserProfileName>: Distribute failed for subscriber '<ep1>':<date> (17): system problem: 'disk_dir create failure'<UserProfileName>: Distribute failed for subscriber '<ep2>':<date> (17): system problem: 'disk_dir create failure'
```

(CMVC-62300)

**Workaround:** You can detect a misconfiguration with the wrpt –q source_host name command. Then, to correct the misconfiguration, use the wrpt –n range=value command, where value matches the value returned from the wrpt –q command.

4. On Solaris systems, the Distribution Status console might lock up with the loading status indicator reporting 75% Installing Distribution Table. This can occur after the system has been running for a while. (CMVC-86638)

**Workaround:** Reboot the Solaris system to enable the console to start.

5. The wmdist –B command does not work correctly on an OS/2 gateway. The following error is returned:

```
Are you sure you want to delete the distribution queue and restart the repeater? {y/n}
```

```y```
FRW:STEX:0005

A communications failure occurred: o_errs:0047 IPC shutdown

At the same time, the OS/2 system displays an error message similar to the following:

System Error - Tivoli Object Server Daemon
SYS3175

A program in this session encountered a problem and cannot continue.

Options:
End program/command/operation
Display register information

The following error appears in the odstat output:
*15536 O done 0 0 11:15:17 IPC_BROKE
1385249390.4.19#TMF_Gateway::Gateway# restart_repeater

(CMVC-98264)

Workaround: The wmdist –B command is supposed to do the following:

a. Stop the OS/2 gateway.
b. Clear the distribution queue.
c. Start the OS/2 gateway.

The first two steps complete successfully, but you must start the OS/2 gateway manually with the wgateway start command. You also must clear the system error on the OS/2 system itself. To do this, select the End program/command/operation option and click the OK button. This has no effect on the gateway. You can do this even after the gateway has been started, and it does not stop the gateway or current distributions that the gateway is processing.

6. Distributions can fail with the following error message:

'iom_receive' failed with code '67'
This occurs when a managed node repeater takes longer than 20 minutes to send a distribution to another repeater. The `rpt2log` file from the sending repeater contains the message:

```
mdist: SHUTDOWN request received
```

(CMVC-98390)

**Workaround:** Do one of the following:

- Increase the repeater’s `net_load` to a value less than 20 minutes.
- Replace the managed node repeater with a gateway repeater.

7. *—For MDist 2, repeater hierarchies containing several levels of repeaters occasionally can result in status not being correctly updated in the database. In these cases, the global status (as viewed by the `wmdist –l` command) shows the correct status. However, the individual endpoint statuses (as viewed by the `wmdist –e` command) show some endpoints in the WAITING state even though they have successfully received the distribution.

(CMVC-98754)

8. The MDist 2 deadline timeout does not interrupt a script running on an endpoint. The repeater waits until the `execute_timeout` deadline for the endpoint script to return. If `execute_timeout` is set to 0, the repeater waits until the script returns. (CMVC-99313)

**Workaround:** So that the gateway properly detects hung endpoints, ensure that the `execute_timeout` has been set appropriately.

- For Tivoli Software Distribution, refer to the `timeout` parameter in the `execute_user_program` action.
- For setting the default for all distributions, refer to the MDist 2 timeout specified by the `wmdist –s execute_timeout` command.

9. For MDist 2, status updates to a Microsoft SQL Server database can fail. This results in an incomplete status for a distribution even though endpoints might have finished. The `$DBDIR/distmgr.log` trace file shows the RDBMS server call failures (trace levels for this log file can be set with the `wmdist –D` command).
10. Checkpoint restart might fail between Windows NT repeaters if a very brief network interruption occurs (30 seconds). The interruption must be severe enough for the open connection to be broken (for example, pulling the network cable). If the interruption is longer (3 to 4 minutes), checkpoint restart works normally. In this situation, the repeater generates the following error message:

'iom_receive' failed with code '35'

11. Distributions to Version 3.6.x endpoints are not supported by Software Distribution, Version 4.0. Tivoli Management Framework, Version 3.7B contains a fix that causes Version 3.6.x endpoints to be failed immediately instead of waiting for the distribution deadline. (CMVC-99047)

NetWare Gateways

1. It is not possible to store the backup images on a NetWare gateway. When attempting a backup from the Tivoli desktop, you cannot specify the name of a NetWare gateway in the Save image on node field. (CMVC-90845)

Workaround: Store the backup images on a non-NetWare managed node.

2. If the NetWare gateway runs out of memory for any reason (for example, a non-Tivoli process running on the gateway), the Tivoli processes are terminated. (CMVC-91564)

Workaround: Restart the Tivoli processes.

3. On NetWare gateways, the Web interface might cause performance problems when a large number of endpoints are managed by the gateway. The resulting Web page would be long and would consume a large amount of memory on the gateway, eventually causing the gateway to be unloaded due to lack of memory. (CMVC-92549)
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4. If gateway.nlm ends abnormally or there is a system trap, it is necessary to delete the gwdb.bdb file before restarting the NetWare gateway. (CMVC-98095)

Notification
After selecting a notification from the Notice Group Message window, clicking **View Message** causes a General Failure window to be displayed, instead of the Notice Message Viewer window. (CMVC-94963)

**Workaround:** Do not click **View Message**. Double-click the notice that you want to view.

Policy Regions

1. The wdelpol command does not delete the specified policy default object or policy validation object. The command makes the policy object unavailable by deleting it from the list of policy objects from which administrators can choose. (CMVC-6850)

2. On Windows NT systems, binary policies do not execute properly on Windows NT endpoint managers and gateways. (CMVC-42284)

**Workaround:** Use a script and call the binary in the script.

Profile Managers

1. APAR-IX82756: Two users can edit the same profile at the same time, causing the first user’s changes to be overwritten by the second user’s changes (most recent update to the record).

2. You cannot use drag-and-drop to distribute a user profile for one-way Tivoli management region connections. (CMVC-8935)

**Workaround:** Use the Distribute option from the pop-up menu of the profile to which you want to distribute.

3. On Windows NT systems, dragging a managed node icon onto a profile manager icon fails to subscribe the managed node to the profile manager. (CMVC-14198)
Known Product Defects, Limitations, and Workarounds

**Workaround:** Open the Profile Manager dialog and drag the managed node icon onto the Subscribers section of the open dialog.

4. The Profile Manager dialog does not work properly on Solaris 2.6 systems. Drag-and-drop operations with file packages also randomly fail. (CMVC-34584)

5. When you attempt to change the label on a managed node, you might receive an *invalid object reference* error message. This error is caused by inconsistencies in CCMS data.

**Workaround:** Contact your support provider for a workaround to this problem.

**RIM**

1. When the Sybase transaction log is filled to capacity, Tivoli Inventory scans do not complete, and you cannot perform any operations that require access to the Tivoli Inventory configuration repository. No status, response, or error is provided. Other Tivoli applications that use RIM might be similarly affected. (CMVC-35663)

**Workaround:** Refer to the Sybase documentation to clear the Sybase transaction log and contact your database administrator for assistance and other options.

**Task Library**

1. APAR-IX80748, IX82550: On the Scheduler dialog, the **Schedule Job For** field sometimes does not provide enough room for the year to be easily viewed. (CMVC-44401)

2. On Windows NT systems, tasks run with a default working directory of the managed node’s database directory. The Tivoli database directory is not accessible to anyone except administrators, so although a task starts there, it cannot change to the database directory. This is a problem when running command shell scripts as tasks because the command shell includes an implicit `cd` before each command it runs. This causes a system error dialog to be displayed on the managed node. (CMVC-14215)
Workaround: Any .cmd or .bat scripts should explicitly change to an accessible directory before attempting to run other commands.

3. The encryption of task data passed between servers and endpoints is disabled. (Task data between servers and managed node clients is still encrypted.) (CMVC-26589)

4. Yearly scheduled jobs for leap years do not execute properly. (CMVC-62066)

5. For Windows NT Tivoli management region servers without TRAA, Windows NT, OS/2, and NetWare gateways running tasks cannot always find the name of the task to run. Without this account, Tivoli Management Framework is unable to access shared network drives—even drives shared as Read directory access for Everyone. (CMVC-89722)

Workaround: Use the `wsettap` command to add an account that is able to access the specified drives.

6. On Windows NT systems, when you do not select a task and click Execute Task, the Task Library window incorrectly displays the following error message:

   No job was selected

   It should state the following:

   No task was selected

   (CMVC-95342)

7. In the Browser Scheduled Jobs dialog, when performing the Remove Job function, a confirmation dialog is displayed:

   To accept the job status change and remain in the Browse Scheduled Jobs dialog, press Set Changes.

   After choosing another job, you no longer get a confirmation dialog, but the job is deleted. (CMVC-95502, 99293)

**Tivoli Desktop**

1. APAR-IX82259: On Windows systems, the desktop closes when you click the close button (X) to close the About TME window.

2. On Windows NT systems, if you modify the user login map (set
with the \texttt{widmap} command) while a desktop is open, some dialogs fail to respond after the change. (CMVC-14199)

\textbf{Workaround}: Close and reopen the desktop after modifying the user login map.

3. On Tivoli Desktop for Windows, a Tivoli administrator might not be able to connect to a managed node unless the administrator has a group name identified in the Administrators Properties dialog. (CMVC-52885)

\textbf{Workaround}: Using the Windows NT Administrator user name, log in to Tivoli Desktop for Windows and perform the following steps:

\begin{enumerate}
  \item Open the \textbf{Administrators} collection to find the icon representing the Tivoli administrator who cannot log in.
  \item Select the \textbf{Edit Properties} option from the administrator icon’s pop-up menu to display the Administrator Properties dialog.
  \item Enter any value in the \textbf{Group Name} text field. If the administrator will be performing actions on UNIX systems and Windows NT systems, this name can be a value set by using the \texttt{widmap} command.
  \item Click the \textbf{Change & Close} button.
  \item Exit the desktop and proceed with the login.
\end{enumerate}