

IBM Tivoli Composite Application Manager for Application Diagnostics V7.1

Readme for the Managing Server update installer V7.1

June 18, 2010

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1 Abstract

The Update Installer for IBM Tivoli Composite Application Manager for Application Diagnostics V7.1 Managing Server provides the following functionality:

- A silent command-line update installer.
- Installation and removal of individual or multiple updates (new versions, Fix Packs and interim fixes) for the Managing Server. (Important: while you can remove Fix Packs, you can **not** use the Update Installer to downgrade from version 7.x to version 6.x)
- Logging, tracking and prerequisites handling.

This readme describes how to use the update installer.

2 Change History

6.1 January 11, 2007

- First release.

7.1 June 18, 2010

- New version, Managing Server only

3 Installing Updates

This section describes how to install new versions, Fix Packs and interim fixes for the Managing Server.

You need to run the Update Installer on every host where any components of the Managing Server are running. In a split Managing Server installation, run it on both hosts. If the Visualization Engine is running on a separate host, run the Update Installer on the Visualization Engine host and the backend component hosts. If the Database Management Server (DB2 or Oracle) is on a separate host, you do not need to run the Update Installer on it.

3.1 Unpacking Update

The Update Installer is distributed in an update package, which is a tar file. You can use this package to update from any 7.0.x or 6.1.x version of the Managing Server.

Create a temporary directory, put the update package there and un-tar. (On Windows, you can use the tar utility provided with Microsoft Services for Unix or any third party archive manager that supports the tar format).

After un-taring the update package get the updates directory that contains the file with the *.update extension. For example:

```
tar xvf 7.1.0-TIV-ITCAMfAD_SVR-FP0001.tar
    silentUpdate.sh
updates/
    ITCAM_V71_UpdateInstaller.htm
    ITCAM_V71_UpdateInstaller.pdf
    alien.jar configUtil.jar
    silentUpdate.bat
    silentUpdate.properties
    update.jar
updates/7.1.0-TIV-ITCAMfAD_SVR-FP0001.update
    7.1.0-TIV-ITCAMfAD_SVR-FP0001.README
```

3.2 Preparing Environment

Before running the update installer login as root (Administrator) or owner of the product directory. Then update the environment as described in this section.

The update installer requires the Runtime Environment for the Java platform version 1.4 or higher. Define the JAVA_HOME environment variable to point to the Runtime Environment used by the Managing Server.

If the Visualization Engine is installed on the host, this is the java directory within the WebSphere Application Server directory. Otherwise, this is the value of JAVA_HOME set in the *MS_home\bin\setenv.sh* file.

3.3 Updating the Response File

The update installer is a non-interactive silent installer that works based on the response file. The default name of the response file is silentUpdate.properties and it is supplied with the update installer. Update the response file as follows:

- Set the `product.location` property to the correct Managing Server installation directory (*MS_home*)
- Optionally, if the *.update files are not in default `./updates` directory, then set the `updates.location` property to the directory that contains the *.update files. (If you have unpacked the package and not moved the files, do not set this property).
- If the Visualization Engine was not installed to the Managing Server host to be updated, set the **updateVe** property to false. Otherwise uncomment and set the **updateVe.wasHome** property with `WAS_PROFILE_HOME` of the Visualization Engine application server.

- In a split Managing Server installation, when several Managing Server hosts that use the same database, this database must be updated only once. It is updated with the default property values, so no change is needed on the first host to update. On the second and subsequent hosts to update, set the **updateDB** property to false.

Perform the following steps if the Visualization Engine is installed on the host to be updated:

- If the Visualization Engine is installed on a WebSphere Network Deployment, use SOAP connection to install the update. For that uncomment and set the following properties in the `silentUpdate.properties` file:

- o `updateVe.was.soap.host=<HOST>`
- o `updateVe.was.soap.port=<PORT>`

If WebSphere Security is enabled, uncomment and set the following properties:

- o `updateVe.was.user=<WAS USER>`
- o `updateVe.was.password=<WAS PASSWORD>`

Note: WebSphere Deployment Manager and Node Agent must be in running state.

- Using user and password information specified in the `*.client.props` file
To retrieve user name and password from `*.client.props` file set the following property in the `silentUpdate.properties` file:

- o `connection.useClientProps=true`

For a SOAP connection, the user name and password will be retrieved from the `soap.client.props` file. (RMI connections are not supported by the update installer).

Note: Do not set `connection.useClientProps=true` if user name and password are not specified in the `soap.client.props` file, it may lead to hang of UpdateInstaller.

If you specify user and password information in the `silentUpdate.properties` file and set `connection.useClientProps=true`, the `silentUpdate.properties` file information overrides the information in the `soap.client.props` file.

Important: the response file is a Java Properties file. Any backward-slashes must be doubled, for example:

```
product.location= C:\\IBM\\itcam\\WebSphere\\MS
```

3.4 Preparing Installation

To reduce the Managing Server downtime, you can use the update installer to prepares the installation while the product is running. This steps is optional.

In order to prepare installation, change to the directory where the update package was unpacked and run the following command:

Windows:

```
silentUpdate.bat -prepareInstall
```

Linux and UNIX systems:

```
./silentUpdate.sh -prepareInstall
```

If your response file is named differently from the default `silentUpdate.properties`, specify it as a parameter:

Windows:

```
silentUpdate.bat -prepareInstall my.properties
```

Linux and UNIX systems:

```
./silentUpdate.sh -prepareInstall my.properties
```

A typical output of the `-prepareInstall` command is:

```
>silentUpdate.bat -prepareInstall
Update installer version 7.1.0, build 20100417164534
Logging details into
C:\IBM\itcam\WebSphere\MS\logs\update\update_20100420204946.log
Action: prepare install
Finished successfully
```

3.5 Installing

To reduce Managing Server downtime, you can run the `-prepareInstall` command before installing the update, see the previous section for details.

Before installing the update, stop the Managing Server.

Attention: if the Managing Server components are running on several hosts, stop the Managing Server on all hosts, then perform the installation on all hosts.

Then, change to the directory where the update package was unpacked and run the following command.

Windows:

```
silentUpdate.bat -install
```

Linux and UNIX systems:

```
./silentUpdate.sh -install
```

If your response file is named differently from the default silentUpdate.properties, specify it as a parameter:

Windows:

```
silentUpdate.bat -install my.properties
```

Linux and UNIX systems:

```
./silentUpdate.sh -install my.properties
```

A typical output of the -install command is:

```
>silentUpdate.bat -install
Update installer version 7.1.0, build 20100417164534
Logging details into
C:\IBM\itcam\WebSphere\MS\logs\update\update_20100420205204.log
Action: install
Finished successfully
```

After installation, review the configuration files. The Update Installer merges any manual configuration changes (including split installation) that were made in the previous version. For details, see Appendix 1.

Then, start the Managing Server.

3.6 Cleaning Prepared Installation

If you have performed the installation, you do not need to clean up the preparation. Do not perform this step.

If you decide to not install the update after you already run -prepareInstall then you can clean results of the '-prepareInstall' command. In order to do that change to the directory where the update installer scripts are stored and run the following command:

Windows:

```
silentUpdate.bat -cleanPrepared
```

Linux and UNIX systems:

```
./silentUpdate.sh -cleanPrepared
```

If your response file is named differently from the default silentUpdate.properties then specify it as a parameter:

Windows:

```
silentUpdate.bat -cleanPrepared my.properties
```

Linux and UNIX systems:

```
./silentUpdate.sh -cleanPrepared my.properties
```

A typical output of the -cleanPrepared command is:

```
>silentUpdate.bat -cleanPrepared
Update installer version 7.1.0, build 20100417164534
Logging details into
C:\IBM\itcam\WebSphere\MS\logs\update\update_20100420205747.log
Action: cancel prepared
Finished successfully
```

3.7 Rolling Back Failed Installation

If the -install command fails and the automatic rollback also fails, you will not be able to install or uninstall any updates until the rollback is completed successfully. In order to complete the rollback, do the following:

- Review the update installer log and resolve the cause of the rollback failure.
- Change to the directory where the update installer scripts are stored and run the following command:

Windows:

```
silentUpdate.bat -rollback
```

Linux and UNIX systems:

```
./silentUpdate.sh -rollback
```

If your response file is named differently from the default silentUpdate.properties, specify it as a parameter:

Windows:

```
silentUpdate.bat -rollback my.properties
```

Linux and UNIX systems:

```
./silentUpdate.sh -rollback my.properties
```

A typical output of the -rollback command is:


```
>silentUpdate.bat -rollback
Update installer version 7.1.0, build 20100417164534
Logging details into
C:\IBM\itcam\WebSphere\MS\logs\update\update_20100420210045.log
Action: rollback
Finished successfully
```

4 Uninstalling Updates

This section describes how to uninstall Fix Packs and interim fixes. The Managing Server will be rolled back to the state before the update.

Attention: the Update Installer does not support rolling back from Version 7.x to version 6.x.

See section 3.1 for information on unpacking the Update Installer.

4.1 Preparing Environment

Before running the update installer, login as root (Administrator) or owner of the product directory. Then update the environment as described in this section.

The update installer requires the Runtime Environment for the Java platform version 1.4 or higher. Define the JAVA_HOME environment variable to point to the Runtime Environment used by the Managing Server.

If the Visualization Engine is installed on the host, this is the `java` directory within the WebSphere Application Server directory. Otherwise, this is the value of JAVA_HOME set in the `MS_home\bin\setenv.sh` file.

4.2 Updating the Response File

The update installer is a non-interactive silent installer that works based on the response file. The default name of the response file is `silentUpdate.properties` and it is supplied with the update installer. Update the response file as follows:

- Set the **product.location** property to the correct Managing Server installation directory (MS_home)
- Optionally, if the *.update files are not in default `./updates` directory, then set the **updates.location** property to the directory that contains the *.update files. (If you have unpacked the package and not moved the files, do not set this property).
- If the Visualization Engine was not installed to the Managing Server host to be updated, set the **updateVe** property to false. Otherwise uncomment and set the **updateVe.wasHome** property with WAS_PROFILE_HOME of the Visualization Engine application server.

Perform the following steps if the Visualization Engine is installed on the host to be updated:

- If the Visualization Engine is installed on a WebSphere Network Deployment, use SOAP connection to install the update. For that uncomment and set the following properties in the `silentUpdate.properties` file:

- `updateVe.was.soap.host=<HOST>`
- `updateVe.was.soap.port=<PORT>`

If WebSphere Security is enabled, uncomment and set the following properties:

- `updateVe.was.user=<WAS USER>`
- `updateVe.was.password=<WAS PASSWORD>`

Note: WebSphere Deployment Manager and Node Agent must be in running state.

- Using user and password information specified in the `*.client.props` file
To retrieve user name and password from `*.client.props` file set the following property in the `silentUpdate.properties` file:

- `connection.useClientProps=true`

For a SOAP connection, the user name and password will be retrieved from the `soap.client.props` file. (RMI connections are not supported by the update installer).

Note: Do not set `connection.useClientProps=true` if user name and password are not specified in the `soap.client.props` file, it may lead to hang of UpdateInstaller.

- If you specify user and password information in the `silentUpdate.properties` file and set `connection.useClientProps=true`, the `silentUpdate.properties` file information overrides the information in the `soap.client.props` file.
- Set the **`uninstall.updates`** property with the one of possible values:
 - **all** – uninstall all updates
 - **last** – uninstall the updates installed by the last `-install` command
 - **<comma separated list of updates>** -- uninstall the specified updates. The updates are specified by their identifiers as displayed by the `-listInstalledUpdates` command.
(example: `7.1.0.1, 7.1.0.1.1`)

Note: the response file is Java Properties file. Any backward-slashes must be doubled, for example:

```
product.location=C:\\IBM\\itcam\\WebSphere\\MS
```

4.3 Preparing Uninstallation

To reduce the Managing Server downtime, you can use the update installer to prepare uninstallation while the product is running. This step is optional.

In order to prepare uninstallation, change to the directory where the update package was unpacked and run the following command:

Windows:

```
silentUpdate.bat -prepareUninstall
```

Linux and UNIX systems:

```
./silentUpdate.sh -prepareUninstall
```

If your response file is named differently from the default `silentUpdate.properties`, specify it as a parameter:

Windows:

```
silentUpdate.bat -prepareUninstall my.properties
```

Linux and UNIX systems:

```
./silentUpdate.sh -prepareUninstall my.properties
```

A typical output of the `-prepareUninstall` command is:

```
>silentUpdate.bat -prepareUninstall
Update installer version 7.1.0, build 20100417164534
Logging details into
C:\IBM\itcam\WebSphere\MS\logs\update\update_20100420205516.log
Action: prepare uninstall
Finished successfully
```

4.4 Uninstalling

To reduce Managing Server downtime, you can run the `-prepareUninstall` command before installing the update, see the previous section for details.

Before installing the update, stop the Managing Server.

Attention: if the Managing Server components are running on several hosts, stop the Managing Server on all hosts, then perform the uninstallation on all hosts.

Then, change to the directory where the update package was unpacked and run the following command:

Windows:

```
silentUpdate.bat -uninstall
```

Linux and UNIX systems:

```
./silentUpdate.sh -uninstall
```

If your response file is named differently from the default silentUpdate.properties, specify it as a parameter:

Windows:

```
silentUpdate.bat -uninstall my.properties
```

Linux and UNIX systems:

```
./silentUpdate.sh -uninstall my.properties
```

A typical output of the -uninstall command is:

```
>silentUpdate.bat -uninstall
Update installer version 7.1.0, build 20100417164534
Logging details into
C:\IBM\itcam\WebSphere\MS\logs\update\update_20100420205553.log
Action: uninstall
Finished successfully
```

After uninstallation, review the configuration files. Changes that were previously made to these files may be lost.

Then, start the Managing Server.

4.5 Cleaning Prepared Uninstallation

If you have performed the uninstallation, you do not need to clean up the preparation. Do not perform this step.

If you decide to not uninstall after you already run -prepareUninstall then you can clean results of the '-prepareUninstall' command. In order to do that change to the directory where the update installer scripts are stored and run the following command:

Windows:

```
silentUpdate.bat -cleanPrepared
```

Linux and UNIX systems:

```
./silentUpdate.sh -cleanPrepared
```

If your response file is named differently from the default silentUpdate.properties, specify it as a parameter:

Windows:

```
silentUpdate.bat -cleanPrepared my.properties
```

Linux and UNIX systems:

```
./silentUpdate.sh -cleanPrepared my.properties
```

A typical output of the -cleanPrepared command is:

```
>silentUpdate.bat -cleanPrepared
Update installer version 7.1.0, build 20100417164534
Logging details into
C:\IBM\itcam\WebSphere\MS\logs\update\update_20100420205747.log
Action: cancel prepared
Finished successfully
```

4.6 Rolling Back Failed Uninstallation

If the -uninstall command fails and the automatic rollback also fails, you will not be able to install or uninstall any updates until the rollback is completed successfully. In order to complete the rollback, do the following:

- Review the update installer log and resolve the cause of the rollback failure.
- Change to the directory where the update installer scripts are stored and run the following command:

Windows:

```
silentUpdate.bat -rollback
```

Linux and UNIX systems:

```
./silentUpdate.sh -rollback
```

If your response file is named differently then the default silentUpdate.properties then specify it as a parameter:

Windows:

```
silentUpdate.bat -rollback my.properties
```

Linux and UNIX systems:

```
./silentUpdate.sh -rollback my.properties
```

A typical output of the -rollback command is:

```
>silentUpdate.bat -rollback
Update installer version 7.1.0, build 20100417164534
Logging details into
C:\IBM\itcam\WebSphere\MS\logs\update\update_20100420210045.log
```

```
Action: rollback
Finished successfully
```

5 Displaying Installed Updates

This section describes how to display a list of the installed Fix Packs and interim fixes. See section 3.1 for information on unpacking the Update Installer.

5.1 Preparing Environment

Before running the update installer, login as root (Administrator) or owner of the product directory. Then update the environment as described in this section.

The update installer requires the Runtime Environment for the Java platform version 1.4 or higher. Define the JAVA_HOME environment variable to point to the Runtime Environment used by the Managing Server.

If the Visualization Engine is installed on the host, this is the `java` directory within the WebSphere Application Server directory. Otherwise, this is the value of JAVA_HOME set in the `MS_home\bin\setenv.sh` file.

5.2 Updating the Response File

The update installer is a non-interactive silent installer that works based on the response file. The default name of the response file is `silentUpdate.properties` and it is supplied with the update installer. Update the response file as follows:

- Set the **product.location** property to the correct Managing Server installation directory (MS_home)

Note: the response file is a Java Properties file. Any backward-slashes must be doubled, for example:

```
product.location=C:\\Program Files\\IBM\\itcam\\WebSphere\\DC
```

5.3 Displaying Installed Updates

To display a list of the installed Fix Packs and interim fixes change to the directory where the update package was unpacked and run the following command:

Windows:

```
silentUpdate.bat -displayInstalledUpdates
```

Linux and UNIX systems:

```
./silentUpdate.sh -displayInstalledUpdates
```

If your response file is named differently from the default `silentUpdate.properties`, specify it as a parameter:

Windows:

```
silentUpdate.bat -displayInstalledUpdates my.properties
```

Linux and UNIX systems:

```
./silentUpdate.sh -displayInstalledUpdates my.properties
```

A typical output of the `- displayInstalledUpdates` command is:

```
>silentUpdate.bat -displayInstalledUpdates
Update installer version 7.1.0, build 20100417164534
Logging details into
C:\IBM\itcam\WebSphere\MS\logs\update\update_20100420205421.log
Action: display installed updates
Updates installed 4/20/10 8:52 PM
        7.1.0.1 Fix Pack 1
Finished successfully
```

6 Appendix 1. Details of configuration file merging

When the Managing Server is updated from version 6.1 to 7.1 (any maintenance level), configuration files are merged to ensure that previous manual configuration changes are preserved as fully as possible.

This is not performed when a maintenance level is uninstalled. Also, when updating from a 7.1 maintenance level to another 7.1 maintenance level, the configuration files are unchanged.

When updating from version 6.1, the update installer performs the following changes:

- First, new properties files are created for all components for which were present in older configuration:
 - `kl*.properties`
 - `klwd*.properties`
 - `ps*.properties`
 - `aa*.properties`
 - `sam*.properties`
 - `log-kl*.properties`
 - `log-ps*.properties`

- log-aa*.properties
- log-sam*.properties
- Next, properties are migrated from the old configuration files (in the old MS_home/etc directory) into new ones:
 - aa*.properties, excluding ENABLE_DATATRIMMER, MEMORY_DATA_DELETE_TIME, GC_DATA_DELETE_TIME, SR_OVERVIEW_DATA_DELETE_TIME, IMS_THREAD_DATA_DELETE_TIME, WEBSERVER_CHART_DATA_DELETE_TIME
 - aa_deletedata.properties
 - ccmdb-sim.properties
 - cyn-cclog.properties
 - cynlogging.properties excluding CYN.msg.listenerNames, CYN.trc.listenerNames, CYN.trc.level
 - kl*.properties
 - klwd*.properties excluding kernel.rfs.host=localhost
 - ms.properties
 - pa.properties
 - ps*.properties excluding ve.host, ve.port
 - sam1.properties
 - ve.properties excluding ve.framework.pdf
 - log-aa*.properties excluding *.publishserver.*, CYN.handler.snap.convertExceptions
 - log-kl*.properties excluding CYN.handler.snap.convertExceptions
 - log-md.properties excluding CYN.handler.snap.convertExceptions
 - log-ps*.properties excluding CYN.trc.level, CYN.handler.snap.convertExceptions
 - log-sam*.properties excluding CYN.handler.snap.convertExceptions
 - log-ws.properties excluding CYN.handler.snap.convertExceptions
 - Log.properties
 - dal/dal.properties (renamed properties are migrated correctly)
- Scripts (*.sh) in the MS_home directory are overwritten, **except** am-start.sh, am-stop.sh, am-status.sh, am-status_codes.sh, and am-forcestop.sh
- A command is appended to am-start.sh: echo "ITCAM MS started"
- A command is appended to am-stop.sh: echo "ITCAM MS stopped"
- The following properties are migrated from the old setenv.sh into the new version:
 - KERNEL_HOST*
 - PORT_KERNEL_CODEBASE*
 - PORT_KERNEL_RFS*
 - PORT_KERNEL_RMI*
 - PORT_ARCHIVE_AGENT*
 - PORT_ARCHIVE_AGENT*
 - PORT_MESSAGE_DISPATCHER
 - PORT_PS*
 - PORT_PA*
 - PORT_SAM*
 - KERNEL_INSTANCE

- PS_INSTANCE
- AA_INSTANCE
- HEAP_MIN_SIZE_*
- HEAP_MAX_SIZE_*
- LOG_COMMON_DIR
- CERT_PATH
- KEYSTR_LOC
- KEYSTR_PASS
- KEYSTR_KEYPASS
- NODE_USERID
- NODE_IP
- USE_SSL

The update installer does not overwrite the dal/TEMAQuerySchema.xml file, so all settings in this file remain active for the new version.