



**stonebranch**

Universal Agent 7.2.x

Maintenance

© 2022 by Stonebranch, Inc. All Rights Reserved.

- 1. Universal Agent 7.2.x Maintenance ..... 3
  - 1.1 All Platforms Package Maintenance Levels - Agent 7.2.x ..... 6
  - 1.2 UNIX Package Maintenance Levels - Agent 7.2.x ..... 10
  - 1.3 Windows Package Maintenance Levels - Agent 7.2.x ..... 14
  - 1.4 z/OS Package Maintenance Levels - Agent 7.2.x ..... 18
  - 1.5 IBM i Package Maintenance Levels - Agent 7.2.x ..... 20
  - 1.6 Component Maintenance Levels - Agent 7.2.x ..... 22

# Universal Agent 7.2.x Maintenance

- [Introduction](#)
- [Product Packaging](#)
  - [Versioning](#)
  - [Packaging Methods](#)
- [Package Maintenance Levels](#)
- [Component Maintenance Levels](#)

## Introduction

Universal Agent 7.2.x consists of a family of components that address distributed systems management and automation. The components are packaged together as product installation packages. Product installation packages are provided for a variety of operating systems and hardware.

Stonebranch provides product maintenance in the form of updated product installation packages that contained the latest maintenance levels of product components. These pages list the product installation package and component maintenance history for Universal Agent 7.2.x.

## Product Packaging

Agent components are bundled together into product installation packages, referred to simply as packages in this document. Each package is identified with a package version number and each component within a package is identified with a component version number.

Each package and component maintenance level is identified with a version number (see [Versioning](#), below). The component maintenance level is incremented whenever a new component is made available that contains defect fixes or feature enhancements. A package maintenance level is incremented when a product component within the package changes or the package installation changes.

Package maintenance levels are not necessarily made available for all platforms. Package maintenance may be released for a subset of supported platforms. For example, Universal Agent 7.2.0 for z/OS and UNIX may be at maintenance level 7.2.0.1, but Universal Agent 7.2.0 for Windows may be at 7.2.0.0.

Stonebranch changes product version, release, or modification identifiers at its discretion when it deems an appropriate number of enhancements or capabilities have been introduced to warrant the change.

## Versioning

Package version numbers are comprised of four numeric identifiers: version, release, modification level, and maintenance level.

For example, for Universal Agent 7.2.0.0:

- 7 = Version 0
- 2 = Release 2
- 0 = Modification Level 0
- 0 = Maintenance Level 0

Product component version numbers are similar to the package version numbers. Each product component within the package is identified with the same version, release, and modification level as the package, and with a maintenance level that is independent of the maintenance level of the package or other components in the package.

For example, within a Universal Agent 7.2.0.1 package, there could be a Universal Command 7.2.0.0 component:

- 7 = Version 7
- 2 = Release 2
- 0 = Modification Level 0

- 0 = Maintenance Level 0

## Packaging Methods

Packaging methods vary among platforms based on the installation conventions and vendor recommendations for the platform. The purpose of this section is to describe the packaging and distribution methods used for the Workload Automation package on its supported platforms.

<b>z/OS</b>	<p>The Universal Agent 7.2.0.0 package is an SMP/E install consisting of multiple FMIDs. The package is composed of a set of FMIDs for MVS components and a set of FMIDs for UNIX System Services (USS) components. The MVS components are required and the USS components are optional.</p> <p>Maintenance is packaged as a cumulative PTF file containing all available product PTFs for all products within the Workload Automation package.</p>
<b>Windows</b>	<p>All packages are created with the InstallShield Windows packaging tool. The package is installed with Microsoft's Windows Installer (file extension .msi).</p> <p>Product maintenance is packaged as an updated Windows Installer installation package. The installation process upgrades the current install to the latest product maintenance level.</p>
<b>UNIX</b>	<p>There are two installation methods supported on UNIX platforms, both of which are initiated from a Stonebranch script:</p> <ul style="list-style-type: none"> <li>• A system installation uses the UNIX package management system to install the product in vendor-recommended installation directories.</li> <li>• A user mode installation method is performed outside of the UNIX package management system. It allows installation of the product in user-selected directories, and supports multiple installs of differing versions or the same versions of the product.</li> </ul> <p>Product maintenance is packaged as an updated installation package. The installation process upgrades the current installation to the latest product maintenance level.</p> <p>UNIX vendor system installation formats are as follows:</p> <ul style="list-style-type: none"> <li>• AIX is packaged in a backup file format (extension .bff) and installed with the AIX installp command.</li> <li>• Sun Solaris is packaged in a Sun software package format and installed with the Sun pkgadd command.</li> <li>• HP-UX is packaged in a HP depot format and installed with the HP swinstall command.</li> <li>• Linux is packaged in a RPM format and installed with the Linux rpm command.</li> <li>• All other UNIX varieties are packaged as compressed tar files and installed with the Stonebranch UNIX installation scripts.</li> </ul>
<b>IBM i</b>	<p>The package is an IBM i Licensed Program and installed with the IBM i RSTLICPGM command. By default, all product and dependent product identifiers are installed.</p> <p>Maintenance is packaged as a cumulative PTF file containing all available product PTFs.</p>

## Package Maintenance Levels

For detailed information on the maintenance levels of platform-specific Universal Agent packages, see:

- [All Platforms Package Maintenance Levels](#)
- [z/OS Package Maintenance Levels](#)
- [Windows Package Maintenance Levels](#)
- [UNIX Package Maintenance Levels](#)
- [IBM i Package Maintenance Levels](#)

## Component Maintenance Levels

For detailed information on the maintenance levels of individual Universal Agent components, see:

- [Component Maintenance Levels](#)



# All Platforms Package Maintenance Levels - Agent 7.2.x

- [Overview](#)
- [Release 7.2.0.0 - April 1, 2022](#)

## Overview


This page identifies the changes made in all Universal Agent 7.2.x maintenance releases, including the initial release, for all supported platforms.

Each change identifies the platform(s) for which it was made.




For a list of changes made to optional Agent 7.2.x packages, such as Universal Command Agent for SOA 6.7.x, see the platform-specific Maintenance Levels pages.







For a list of all changes in a release - all platforms, specific components - see [Component Maintenance Levels](#).



Note

 **Install** changes refer to changes to the programs, scripts, or supporting files used to install the package. There are no changes to the actual product components.

## Release 7.2.0.0 - April 1, 2022

B-13-286	z /OS	UA GS RV	<p>Extend the <a href="#">AUTOMATIC_FAILOVER</a> option to support the <b>primary_secondary</b> value, which will instruct a Universal Agent configured with a <a href="#">SYSPLEX_ROLE</a> of <b>primary</b> to start as a <b>secondary</b> Agent if another primary Agent is already running.</p> <p>Note  The <a href="#">AUTOMATIC_FAILOVER</a> option continues to support a default value of <b>never</b>, which will disable automatic failover and will require failovers to be managed manually via a Universal Broker <a href="#">MODIFY</a> command.</p>
B-13-287	z /OS	UA GS RV	<p>Extend the <a href="#">AUTOMATIC_FAILOVER</a> option to support the <b>secondary_primary[n]</b> value, where <i>n</i> is an optional numeric value that sets a priority to determine which <b>secondary</b> Agent (among several active secondary Agents) will take over as <b>primary</b>.</p> <p>Note  The <a href="#">AUTOMATIC_FAILOVER</a> option continues to support a default value of <b>never</b>, which will disable automatic failover and will require failovers to be managed manually via a Universal Broker <a href="#">MODIFY</a> command.</p>
B-13-288	z /OS	UA GS RV	<p>Added the (mutually-exclusive) <a href="#">ZOS_JOB_SYSAFF</a> and <a href="#">ZOS_JOB_SYSTEM</a> configuration options that can manage a zOS task's execution via a SYSAFF or SYSTEM JOB card parameter, respectively.</p>
B-13-292	z /OS	UA GS RV	<p>Extend the <a href="#">AUTOMATIC_FAILOVER</a> option to support the <b>always_primary</b> value, which will force an Agent whose <a href="#">SYSPLEX_ROLE</a> is <b>primary</b> to always start as a Primary Agent. Any other Agent running as a Primary Agent will become a Secondary Agent when this Agent starts.</p> <p>Note  The <a href="#">AUTOMATIC_FAILOVER</a> option continues to support a default value of <b>never</b>, which will disable automatic failover and will require failovers to be managed manually via a Universal Broker <a href="#">MODIFY</a> command.</p>

B-14-036	All	UFTP	<p>Establish a connection to the (S)FTP Server before attempting the requested transfer operation. This will allow connection-specific failures to be isolated and reported.</p> <p>To support this change, the following message:</p> <p><b>UNV3707E cURL reports could not connect.</b></p> <p>was replaced with:</p> <p><b>UNV6955E Unable to establish an FTP server connection (curl_rc):curl_msg</b></p> <p>where <i>curl_rc</i> and <i>curl_msg</i> are the return code and error message, respectively, that identify the problem.</p> <p>In addition, UFTP now displays the entire connection conversation between it and the Server without requiring the <b>-verbose</b> option.</p>
B-14-071	Unix	UAGSRV	<p>Add the <b>KILL_PROCESS_TREE</b> option to control how UAG Server responds to a Cancel task command from Universal Controller. When <b>yes</b>, the entire process tree is terminated via SIGTERM. Any process within the tree that is still running after 10 seconds is terminated with a SIGKILL. UAG Server will confirm that all processes in the process tree are terminated before it notifies the Controller of the termination.</p> <p>To preserve compatibility with existing behavior, the default value for this option is <b>no</b>, which can prevent the termination of a process in the tree that ignores the SIGTERM signal. This may cause the task's status in the Universal Controller to show Cancelled although the (now orphaned) process continues to run.</p> <p>Note </p> <p>This new option has no effect on tasks running with sudo authority. Such tasks will not receive a SIGTERM signal and are always terminated immediately with a SIGKILL.</p>
B-14-270	Unix Windows	UEXT	<p>Remove internal DEBUG-level messages that are generated by the Universal Extension base class when the extension task's log level is DEBUG.</p> <p>Only DEBUG messages issued by the extension developer should be shown.</p> <p>Note </p> <p>The HP-UX and z/OS Agents do not provide the Universal Extension.</p>
B-14-271	Unix Windows	UEXT	<p>Add the following commands/options to the <b>UIP-CLI</b> utility:</p> <ul style="list-style-type: none"> <li>• <b>task launch</b> - launch a Universal Extension task</li> <li>• <b>task status</b> - obtain the status of a Universal Extension task</li> <li>• <b>task output</b> - obtain the output generated by a Universal Extension task</li> </ul> <p>Note </p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>
B-14-544	Unix Windows	UEXT	<p>Make all all <b>Task Instance</b> variables set by the Controller for a Universal Extension task available to the Extension.</p> <p>An extension can access these variables via the <code>self.uip.task_variables</code> dictionary property (e.g., <code>self.uip.task_variables['ops_task_id']</code>).</p> <p>Note </p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>
B-14-630	Unix Windows	UAGSRVUFTP	<p>Add the ability to retrieve values from the Universal Controller File Transfer Task form that support transfers using explicit FTPS (that is, FTP with SSL).</p> <p>Note </p> <p>Explicit FTPS (FTPES) support was added to the Agent in the 7.1.0.0 release with B-10691. The change delivered in Universal Agent 7.2.0.0 provides full support and integration with the File Transfer Task.</p>
B-14-720	Windows	UEXT	<p>Add Visual Studio Code Plugin support for the UIP-CLI <b>task</b> commands provided by B-14271 (see above).</p> <p>Note </p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>

B-14 724	Unix Windows	UE XT	<p>To support integration with <a href="#">Universal Monitor</a> tasks, receive information from the Controller that can be used to identify an Extension task launched via a <a href="#">Universal Monitor Trigger</a>.</p> <p>Values received from the Controller are saved in the following properties:</p> <ul style="list-style-type: none"> <li><code>self.uip.trigger_id</code> - the Trigger UUID value set by the Controller that uniquely identifies the trigger instance. This will be undefined if the extension task was not launched by a Universal Monitor Trigger.</li> <li><code>self.uip.instance_id</code> - the EXECID set by the Controller that uniquely identifies the Extension task instance</li> <li><code>self.uip.monitor_id</code> - the Universal Monitor UUID that uniquely identifies the Universal Monitor instance. This will be undefined if the extension task was not launched by a Universal Monitor.</li> </ul> <p>The Universal Extension base class sets the following property when a Trigger ID is received:</p> <ul style="list-style-type: none"> <li><code>self.uip.is_triggered</code> <ul style="list-style-type: none"> <li>If the Extension task was executed via a Universal Monitor Trigger, this property will be <b>True</b>. Otherwise, it is <b>False</b>.</li> </ul> </li> </ul> <p><b>Note</b>   The HP-UX and z/OS agents do not provide the Universal Extension.</p>
B-14 725	Unix Windows	UAGS RV UE XT	<p>Add full support for <a href="#">Universal Monitor</a> tasks, including the ability to reconnect to Universal Extension tasks (executed on behalf of the Monitor task) that continue to run when an Agent is restarted.</p> <p><b>Note</b>   The HP-UX and z/OS agents do not provide the Universal Extension.</p>
D-10 379	Windows	UAGS RV	<p>Fix an issue where a File Monitor task running on a Windows Agent fails to recognize Unicode characters.</p>
D-10 417	Unix Windows	OM SS RV	<p>Fix an issue that prevents a z/OS Agent using IBM System SSL (i.e., RACF-based keyrings) from connecting to an OMS Server.</p>
D-10 430	Unix Windows	UAGS RV	<p>When an SAP task instance is cancelled, ensure that the associated Universal Connector for SAP (USAP) process is cancelled as well.</p>
D-10 523	Unix Windows	UDM UDMS RV	<p>Prevent an authentication error for a File Transfer task when the following conditions exist:</p> <ul style="list-style-type: none"> <li>File Transfer task uses Universal Data Mover (UDM)</li> <li>UDM script is used by the task</li> <li>UDM script issues the <code>exec</code> or <code>execsap</code> command</li> <li><code>exec</code> or <code>execsap</code> command uses the <code>pwd</code> parameter</li> <li>One of the built-in credential variables – <code>\$(ops_primary_cred_pwd)</code> or <code>\$(ops_secondary_cred_pwd)</code> -- is used for the <code>pwd</code> parameter's value</li> </ul> <p>For example:</p> <div data-bbox="283 1203 1959 1365" style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <p><b>UDM Script Statements</b></p> <pre>open src=local dst=rmthost.ipaddr user=\$(ops_secondary_cred_user) pwd=\$(ops_secondary_cred_pwd) exec src cmd="dir" user=\$(ops_primary_cred_user) pwd=\$(ops_primary_cred_pwd)</pre> </div> <p>Starting with UA 7.0.0.0, this will cause the resolved <code>\$(ops_primary_cred_pwd)</code> value in the <code>exec</code> statement to be enclosed in double quotes (<code>"</code>). The double quotes are retained when passed to UCMD Manager (or USAP for an <code>execsap</code> statement). The double quotes will prevent successful password authentication.</p>

D-10-530	Unix	UB RO KER	When the Universal Broker daemon encounters an EPIPE when attempting to log a message to <code>unv.log</code> , close the existing log file and resume logging to a new file.
D-10-531	z/OS	UDM  UD MS RV	<p>Fix an issue where an attempt to transfer PDS members from z/OS using UDM may result in an S0C4 ABEND.</p> <p>When this occurs, the following error is reported:</p> <pre>CEE3204S The system detected a protection exception (System Completion Code=0C4). From entry point UPdsRead at compile unit offset +00000398 at entry offset +00000398 at address 0A5B5030.</pre> <p>Note  This problem was introduced by D-08997, delivered in UA 7.1.0.0.</p>
D-10-534	Unix Windows	UA GS RV UE XT	<p>UAG Server may crash when a Universal Extension task references a credential token greater than 3000 characters in length.</p> <p>Note  The HP-UX and z/OS agents do not provide the Universal Extension.</p>
D-10-556	z/OS	UA GS RV	<p>Fix an issue that prevented a file monitor task from locating datasets when a wildcard is used as the first character in the dataset pattern.</p> <p>This restores behavior that existed prior to Universal Agent 7.0.0.0.</p>
D-10-559	Unix Windows	UA GS RV	Fix an issue introduced in UA 7.1.0.0, where a Universal Task fails to properly resolve resolvable credentials when the credential variable is enclosed in double quotes.
D-10-567	Unix Windows	OM SS RV	When OMS Server's <a href="#">AUTHENTICATE_PEER</a> option is <b>no</b> , fix an issue that will cause OMS to accept an SSL connection when no client certificate is presented, even when an <a href="#">OMS_ACCESS</a> UACL rule exists to reject such connections.
D-10-676	All	UFTP	Ensures that UFTP will not crash when used to transfer a comma-separated list of files from z/OS using the MGET command.
D-10-687	z/OS	UA GS RV	<p>When running a File Transfer Task via a z/OS Agent, if the Local and/or Remote Filename values exceeded 72 characters, UAG Server failed to properly format the SYSIN DD statement in the JCL used to execute UFTP.</p> <p>The z/OS Agent now ensures that such values are properly terminated at column 72 and continued to the next line.</p>

# UNIX Package Maintenance Levels - Agent 7.2.x

- [Overview](#)
- [Universal Agent 7.2.x for UNIX Packages](#)
  - [Agent 7.2.0.0 - April 1, 2022](#)
- [Universal Agent for SOA 6.9.x for UNIX Packages](#)
  - [Agent for SOA 6.9.0.0 - October 19, 2020](#)

## Overview

This page identifies the package contents for all Universal Agent 7.2.x for UNIX maintenance releases, including the initial release, and the maintenance level of every component in each package.

For each release, changes made to individual components for UNIX only, and for UNIX and one or more other platforms, are identified. Maintenance level changes to a component for non-UNIX platforms are not shown.

For a list of all changes in a release - all platforms, all components - see [All Platforms Package Maintenance Levels - Agent 7.2.x](#).

For a list of all changes in a release - all platforms, specific components - see [Component Maintenance Levels - Agent 7.2.x](#).

## Universal Agent 7.2.x for UNIX Packages

This table identifies components generally available for UNIX.

For a list of components currently contained in specific UNIX platforms, see [Platform Support for Universal Controller 7.2.x and Universal Agent 7.2.x](#).

Release	Release Date	Install	Universal Broker	Universal Automation Center Agent	Universal Message Service	Controller Command Line Interface	Universal Certificate	Universal Command Manager	Universal Command Server	Universal Connector for SAP	Universal Connector for PeopleSoft	Universal Control	Universal Database Utilities	Universal Data Mover Manager	Universal Data Mover Server	Universal Encrypt	Uni Ent Cor
<a href="#">7.2.0.0</a>	April 1, 2022		7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	






Note






**Install** changes refer to changes to the programs, scripts, or supporting files used to install the package. There are no changes to the actual product components.

### Agent 7.2.0.0 - April 1, 2022

Change ID	Platforms	Component	Description
-----------	-----------	-----------	-------------

B-14036	All	UFTP	<p>Establish a connection to the (S)FTP Server before attempting the requested transfer operation. This will allow connection-specific failures to be isolated and reported.</p> <p>To support this change, the following message:</p> <p><b>UNV3707E cURL reports could not connect.</b></p> <p>was replaced with:</p> <p><b>UNV6955E Unable to establish an FTP server connection (curl_rc):curl_msg</b></p> <p>where <i>curl_rc</i> and <i>curl_msg</i> are the return code and error message, respectively, that identify the problem.</p> <p>In addition, UFTP now displays the entire connection conversation between it and the Server without requiring the <b>-verbose</b> option.</p>
B-14071	Unix	UAGSRV	<p>Add the <b>KILL_PROCESS_TREE</b> option to control how UAG Server responds to a Cancel task command from Universal Controller. When <b>yes</b>, the entire process tree is terminated via SIGTERM. Any process within the tree that is still running after 10 seconds is terminated with a SIGKILL. UAG Server will confirm that all processes in the process tree are terminated before it notifies the Controller of the termination.</p> <p>To preserve compatibility with existing behavior, the default value for this option is <b>no</b>, which can prevent the termination of a process in the tree that ignores the SIGTERM signal. This may cause the task's status in the Universal Controller to show Cancelled although the (now orphaned) process continues to run.</p> <p>Note </p> <p>This new option has no effect on tasks running with sudo authority. Such tasks will not receive a SIGTERM signal and are always terminated immediately with a SIGKILL.</p>
B-14270	Unix Windows	UEXT	<p>Remove internal DEBUG-level messages that are generated by the Universal Extension base class when the extension task's log level is DEBUG.</p> <p>Only DEBUG messages issued by the extension developer should be shown.</p> <p>Note </p> <p>The HP-UX and z/OS Agents do not provide the Universal Extension.</p>
B-14271	Unix Windows	UEXT	<p>Add the following commands/options to the <b>UIP-CLI</b> utility:</p> <ul style="list-style-type: none"> <li>• <b>task launch</b> - launch a Universal Extension task</li> <li>• <b>task status</b> - obtain the status of a Universal Extension task</li> <li>• <b>task output</b> - obtain the output generated by a Universal Extension task</li> </ul> <p>Note </p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>
B-14544	Unix Windows	UEXT	<p>Make all all <b>Task Instance</b> variables set by the Controller for a Universal Extension task available to the Extension.</p> <p>An extension can access these variables via the <code>self.uip.task_variables</code> dictionary property (e.g., <code>self.uip.task_variables['ops_task_id']</code>).</p> <p>Note </p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>
B-14630	Unix Windows	UAGSRV UFTP	<p>Add the ability to retrieve values from the Universal Controller File Transfer Task form that support transfers using explicit FTPS (i.e., FTP with SSL).</p> <p>Note </p> <p>Explicit FTPS (FTPES) support was added to the Agent in the 7.1.0.0 release with B-10691. The change delivered in UA 7.2.0.0 provides full support and integration with the File Transfer Task.</p>

B-14724	Unix Windows	UEXT	<p>To support integration with <a href="#">Universal Monitor</a> tasks, receive information from the Controller that can be used to identify an Extension task launched via a <a href="#">Universal Monitor Trigger</a>.</p> <p>Values received from the Controller are saved in the following properties:</p> <ul style="list-style-type: none"> <li>• <code>self.uip.trigger_id</code> - the Trigger UUID value set by the Controller that uniquely identifies the trigger instance. This will be undefined if the extension task was not launched by a Universal Monitor Trigger.</li> <li>• <code>self.uip.instance_id</code> - the EXECID set by the Controller that uniquely identifies the Extension task instance</li> <li>• <code>self.uip.monitor_id</code> - the Universal Monitor UUID that uniquely identifies the Universal Monitor instance. This will be undefined if the extension task was not launched by a Universal Monitor.</li> </ul> <p>The Universal Extension base class sets the following property when a Trigger ID is received:</p> <ul style="list-style-type: none"> <li>• <code>self.uip.is_triggered</code> <ul style="list-style-type: none"> <li>• If the Extension task was executed via a Universal Monitor Trigger, this property will be <b>True</b>. Otherwise, it is <b>False</b>.</li> </ul> </li> </ul> <p>Note   The HP-UX and z/OS agents do not provide the Universal Extension.</p>
B-14725	Unix Windows	UAGSRV UEXT	<p>Add full support for <a href="#">Universal Monitor</a> tasks, including the ability to reconnect to Universal Extension tasks (executed on behalf of the Monitor task) that continue to run when an Agent is restarted.</p> <p>Note   The HP-UX and z/OS agents do not provide the Universal Extension.</p>
D-10417	Unix Windows	OMSSRV	<p>Fix an issue that prevents a z/OS Agent using IBM System SSL (i.e., RACF-based keyrings) from connecting to an OMS Server.</p>
D-10430	Unix Windows	UAGSRV	<p>When an SAP task instance is cancelled, ensure that the associated Universal Connector for SAP (USAP) process is cancelled as well.</p>
D-10523	Unix Windows	UDM UDMSRV	<p>Prevent an authentication error for a File Transfer task when the following conditions exist:</p> <ul style="list-style-type: none"> <li>• The File Transfer task uses Universal Data Mover (UDM)</li> <li>• A UDM script is used by the task</li> <li>• The UDM script issues the <code>exec</code> or <code>execsap</code> command</li> <li>• The <code>exec</code> or <code>execsap</code> command uses the <code>pwd</code> parameter</li> <li>• One of the built-in credential variables – <code>\$(ops_primary_cred_pwd)</code> or <code>\$(ops_secondary_cred_pwd)</code> – is used for the <code>pwd</code> parameter's value</li> </ul> <p>For example:</p> <div data-bbox="514 1036 1957 1198" style="border: 1px solid #ccc; padding: 10px;"> <p><b>UDM Script Statements</b></p> <pre>open src=local dst=rmthost.ipaddr user=\$(ops_secondary_cred_user) pwd=\$(ops_secondary_cred_pwd) exec src cmd="dir" user=\$(ops_primary_cred_user) pwd=\$(ops_primary_cred_pwd)</pre> </div> <p>Starting with UA 7.0.0.0, this will cause the resolved <code>\$(ops_primary_cred_pwd)</code> value in the <code>exec</code> statement to be enclosed in double quotes (""). The double quotes are retained when passed to UCMD Manager (or USAP for an <code>execsap</code> statement). The double quotes will prevent successful password authentication.</p>
D-10530	Unix	UBROKER	<p>When the Universal Broker daemon encounters an EPIPE when attempting to log a message to <code>unv.log</code>, close the existing log file and resume logging to a new file.</p>
D-10534	Unix Windows	UAGSRV UEXT	<p>UAG Server may crash when a Universal Extension task references a credential token greater than 3000 characters in length.</p> <p>Note   The HP-UX and z/OS agents do not provide the Universal Extension.</p>

D-10559	Unix Windows	UAGSRV	Fix an issue introduced in UA 7.1.0.0, where a Universal Task fails to properly resolve resolvable credentials when the credential variable is enclosed in double quotes.
D-10567	Unix Windows	OMSSRV	When OMS Server's <a href="#">AUTHENTICATE_PEER</a> option is <b>no</b> , fix an issue that will cause OMS to accept an SSL connection when no client certificate is presented, even when an <a href="#">OMS_ACCESS</a> UACL rule exists to reject such connections.
D-10676	All	UFTP	Ensures that UFTP will not crash when used to transfer a comma-separated list of files from zOS using the MGET command.

## Universal Agent for SOA 6.9.x for UNIX Packages

### Agent for SOA 6.9.0.0 - October 19, 2020

(There have been no changes to this release.)


# Windows Package Maintenance Levels - Agent 7.2.x

- [Overview](#)
- [Universal Agent 7.2.x for Windows Packages](#)
  - [Agent 7.2.0.0 - April 1, 2022](#)
- [Universal Enterprise Controller 6.3.0 for Windows Packages](#)
  - [UEC 6.3.0.0 - January 18, 2016](#)
- [Universal Enterprise Controller Client Applications 6.3.0 for Windows Packages](#)
  - [UEC Client Applications 6.3.0.0 - January 18, 2016](#)
- [Universal Agent for SOA 6.9.x for Windows Packages](#)
  - [Agent for SOA 6.9.0.0 - October 19, 2020](#)

## Overview

This page identifies the package contents for all Universal Agent 7.2.x for Windows maintenance releases, including the initial release, and the maintenance level of every component in each package.

Note

 For the Universal Enterprise Controller and UEC Client Applications packages, the information provided is for their latest release: 6.3.0.0.

For each release, changes made to individual components for Windows only, and for Windows and one or more other platforms, are identified. Maintenance level changes to a component for non-Windows platforms are not shown.


For a list of all changes in a release - all platforms, all components - see [All Platforms Package Maintenance Levels - Agent 7.2.x](#).

For a list of all changes in a release - all platforms, specific components - see [Component Maintenance Levels - Agent 7.2.x](#).

## Universal Agent 7.2.x for Windows Packages






Release	Release Date	Install	Universal Broker	Universal Automation Center Agent	Universal Message Service	Controller Command Line Interface	Universal Certificate	Universal Command Manager	Universal Command Server	Universal Connector for SAP	Universal Connector for PeopleSoft	Universal Control	Universal Database Utilities	Universal Data Mover Manager	Universal Data Mover Server	Universal Encrypt	Uni Eve Moi Mar
<a href="#">7.2.0.0</a>	April 1, 2022	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0




Note

 **Install** changes refer to changes to the programs, scripts, or supporting files used to install the package. There are no changes to the actual product components.

### Agent 7.2.0.0 - April 1, 2022

Change ID	Platforms	Component	Description
-----------	-----------	-----------	-------------

B-14036	All	UFTP	<p>Establish a connection to the (S)FTP Server before attempting the requested transfer operation. This will allow connection-specific failures to be isolated and reported.</p> <p>To support this change, the following message:</p> <p><b>UNV3707E cURL reports could not connect.</b></p> <p>was replaced with:</p> <p><b>UNV6955E Unable to establish an FTP server connection (curl_rc):curl_msg</b></p> <p>where <i>curl_rc</i> and <i>curl_msg</i> are the return code and error message, respectively, that identify the problem.</p> <p>In addition, UFTP now displays the entire connection conversation between it and the Server without requiring the <b>-verbose</b> option.</p>
B-14270	Unix Windows	UEXT	<p>Remove internal DEBUG-level messages that are generated by the Universal Extension base class when the extension task's log level is DEBUG.</p> <p>Only DEBUG messages issued by the extension developer should be shown.</p> <p>Note </p> <p>The HP-UX and z/OS Agents do not provide the Universal Extension.</p>
B-14271	Unix Windows	UEXT	<p>Add the following commands/options to the <b>UIP-CLI</b> utility:</p> <ul style="list-style-type: none"> <li>• <b>task launch</b> - launch a Universal Extension task</li> <li>• <b>task status</b> - obtain the status of a Universal Extension task</li> <li>• <b>task output</b> - obtain the output generated by a Universal Extension task</li> </ul> <p>Note </p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>
B-14544	Unix Windows	UEXT	<p>Make all all <b>Task Instance</b> variables set by the Controller for a Universal Extension task available to the Extension.</p> <p>An extension can access these variables via the <code>self.uip.task_variables</code> dictionary property (e.g., <code>self.uip.task_variables['ops_task_id']</code>).</p> <p>Note </p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>
B-14630	Unix Windows	UAGSRV UFTP	<p>Add the ability to retrieve values from the Universal Controller File Transfer Task form that support transfers using explicit FTPS (i.e., FTP with SSL).</p> <p>Note </p> <p>Explicit FTPS (FTPES) support was added to the Agent in the 7.1.0.0 release with B-10691. The change delivered in UA 7.2.0.0 provides full support and integration with the File Transfer Task.</p>
B-14720	Windows	UEXT	<p>Add Visual Studio Code Plugin support for the UIP-CLI <b>task</b> commands provided by B-14271 (see above).</p> <p>Note </p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>

B-14724	Unix Windows	UEXT	<p>To support integration with <a href="#">Universal Monitor</a> tasks, receive information from the Controller that can be used to identify an Extension task launched via a <a href="#">Universal Monitor Trigger</a>.</p> <p>Values received from the Controller are saved in the following properties:</p> <ul style="list-style-type: none"> <li>• <code>self.uip.trigger_id</code> - the Trigger UUID value set by the Controller that uniquely identifies the trigger instance. This will be undefined if the extension task was not launched by a Universal Monitor Trigger.</li> <li>• <code>self.uip.instance_id</code> - the EXECID set by the Controller that uniquely identifies the Extension task instance</li> <li>• <code>self.uip.monitor_id</code> - the Universal Monitor UUID that uniquely identifies the Universal Monitor instance. This will be undefined if the extension task was not launched by a Universal Monitor.</li> </ul> <p>The Universal Extension base class sets the following property when a Trigger ID is received:</p> <ul style="list-style-type: none"> <li>• <code>self.uip.is_triggered</code> <ul style="list-style-type: none"> <li>• If the Extension task was executed via a Universal Monitor Trigger, this property will be <b>True</b>. Otherwise, it is <b>False</b>.</li> </ul> </li> </ul> <p>Note</p> <p> The HP-UX and z/OS agents do not provide the Universal Extension.</p>
B-14725	Unix Windows	UAGSRV UEXT	<p>Add full support for <a href="#">Universal Monitor</a> tasks, including the ability to reconnect to Universal Extension tasks (executed on behalf of the Monitor task) that continue to run when an Agent is restarted.</p> <p>Note</p> <p> The HP-UX and z/OS agents do not provide the Universal Extension.</p>
D-10379	Windows	UAGSRV	Fix an issue where a File Monitor task running on a Windows Agent fails to recognize Unicode characters.
D-10417	Unix Windows	OMSSRV	Fix an issue that prevents a z/OS Agent using IBM System SSL (i.e., RACF-based keyrings) from connecting to an OMS Server.
D-10430	Unix Windows	UAGSRV	When an SAP task instance is cancelled, ensure that the associated Universal Connector for SAP (USAP) process is cancelled as well.
D-10523	Unix Windows	UDM UDMSRV	<p>Prevent an authentication error for a File Transfer task when the following conditions exist:</p> <ul style="list-style-type: none"> <li>• The File Transfer task uses Universal Data Mover (UDM)</li> <li>• A UDM script is used by the task</li> <li>• The UDM script issues the <code>exec</code> or <code>execsap</code> command</li> <li>• The <code>exec</code> or <code>execsap</code> command uses the <code>pwd</code> parameter</li> <li>• One of the built-in credential variables – <code>\$(ops_primary_cred_pwd)</code> or <code>\$(ops_secondary_cred_pwd)</code> – is used for the <code>pwd</code> parameter's value</li> </ul> <p>For example:</p> <div style="border: 1px solid #ccc; padding: 5px; margin: 10px 0;"> <p><b>UDM Script Statements</b></p> <pre>open src=local dst=rmt host.ipaddr user=\$(ops_secondary_cred_user) pwd=\$(ops_secondary_cred_pwd) exec src cmd="dir" user=\$(ops_primary_cred_user) pwd=\$(ops_primary_cred_pwd)</pre> </div> <p>Starting with UA 7.0.0.0, this will cause the resolved <code>\$(ops_primary_cred_pwd)</code> value in the <code>exec</code> statement to be enclosed in double quotes ("). The double quotes are retained when passed to UCMD Manager (or USAP for an <code>execsap</code> statement). The double quotes will prevent successful password authentication.</p>
D-10534	Unix Windows	UAGSRV UEXT	<p>UAG Server may crash when a Universal Extension task references a credential token greater than 3000 characters in length.</p> <p>Note</p> <p> The HP-UX and z/OS agents do not provide the Universal Extension.</p>
D-10559	Unix Windows	UAGSRV	Fix an issue introduced in UA 7.1.0.0, where a Universal Task fails to properly resolve resolvable credentials when the credential variable is enclosed in double quotes.

D-10567	Unix Windows	OMSSRV	When OMS Server's <a href="#">AUTHENTICATE_PEER</a> option is <b>no</b> , fix an issue that will cause OMS to accept an SSL connection when no client certificate is presented, even when an <a href="#">OMS_ACCESS</a> UACL rule exists to reject such connections.
D-10676	All	UFTP	Ensures that UFTP will not crash when used to transfer a comma-separated list of files from zOS using the MGET command.

## Universal Enterprise Controller 6.3.0 for Windows Packages

### UEC 6.3.0.0 - January 18, 2016

(There have been no changes to this release.)

## Universal Enterprise Controller Client Applications 6.3.0 for Windows Packages

### UEC Client Applications 6.3.0.0 - January 18, 2016

(There have been no changes to this release.)

## Universal Agent for SOA 6.9.x for Windows Packages

### Agent for SOA 6.9.0.0 - October 19, 2020

(There have been no changes to this release.)

# z/OS Package Maintenance Levels - Agent 7.2.x

- [Overview](#)
- [Universal Agent 7.2.x for z/OS Packages](#)
  - [Agent 7.2.0.0 - April 1, 2022](#)

## Overview

This page identifies the package contents for all Universal Agent 7.2.x for z/OS maintenance releases, including the initial release, and the maintenance level of every component in each package.

For each release, changes made to individual components for z/OS only, and for z/OS and one or more other platforms, are identified. Maintenance level changes to a component for non-z/OS platforms are not shown.

For a list of all changes in a release - all platforms, all components - see [All Platforms Package Maintenance Levels - Agent 7.2.x](#).

For a list of all changes in a release - all platforms, specific components - see [Component Maintenance Levels - Agent 7.2.x](#).

## Universal Agent 7.2.x for z/OS Packages

The following table identifies the maintenance level of all components contained in each Universal Agent 7.2.x for z/OS package.

Release	Release Date	SMP /E Install	Universal Broker	Universal Automation Center Agent	Universal Message Service (OMS)	Controller Command Line Interface	Universal Certificate	Universal Command Manager	Universal Command Server	Universal Connector for SAP	Universal Connector for PeopleSoft	Universal Control	Universal Database Utilities	Universal Data Mover Manager	Universal Data Mover Server	Universal Encrypt	Uni Ent Cor
<a href="#">7.2.0.0</a>	April 1, 2022	7.2.0.0	7.2.0.0	7.2.0.0		7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	6.1.0.0		7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0	7.2.0.0




Note



**Install** changes refer to changes to the programs, scripts, or supporting files used to install the package. There are no changes to the actual product components.

## Agent 7.2.0.0 - April 1, 2022

Change ID	Platforms	Component	Description
B-13286	zOS	UAGSRV	<p>Extend the <a href="#">AUTOMATIC_FAILOVER</a> option to support the <b>primary_secondary</b> value, which will instruct a Universal Agent configured with a <a href="#">SYSPLEX_ROLE</a> of <b>primary</b> to start as a <b>secondary</b> Agent if another primary Agent is already running.</p> <p>Note</p> <p>The <a href="#">AUTOMATIC_FAILOVER</a> option continues to support a default value of <b>never</b>, which will disable automatic failover and will require failovers to be managed manually via a Universal Broker <a href="#">MODIFY</a> command.</p>

B-13287	zOS	UAGSRV	<p>Extend the <a href="#">AUTOMATIC_FAILOVER</a> option to support the <b>secondary_primary[n]</b> value, where <i>n</i> is an optional numeric value that sets a priority to determine which <b>secondary</b> Agent (among several active secondary Agents) will take over as <b>primary</b>.</p> <p>Note </p> <p>The <a href="#">AUTOMATIC_FAILOVER</a> option continues to support a default value of <b>never</b>, which will disable automatic failover and will require failovers to be managed manually via a Universal Broker <a href="#">MODIFY</a> command.</p>
B-13288	zOS	UAGSRV	<p>Added the (mutually-exclusive) <a href="#">ZOS_JOB_SYSAFF</a> and <a href="#">ZOS_JOB_SYSTEM</a> configuration options that can manage a z/OS task's execution via a SYSAFF or SYSTEM JOB card parameter, respectively.</p>
B-13292	zOS	UAGSRV	<p>Extend the <a href="#">AUTOMATIC_FAILOVER</a> option to support the <b>always_primary</b> value, which will force an Agent whose <a href="#">SYSPLEX_ROLE</a> is <b>primary</b> to always start as a Primary Agent. Any other Agent running as a Primary Agent will become a Secondary Agent when this Agent starts.</p> <p>Note </p> <p>The <a href="#">AUTOMATIC_FAILOVER</a> option continues to support a default value of <b>never</b>, which will disable automatic failover and will require failovers to be managed manually via a Universal Broker <a href="#">MODIFY</a> command.</p>
B-14036	All	UFTP	<p>Establish a connection to the (S)FTP Server before attempting the requested transfer operation. This will allow connection-specific failures to be isolated and reported.</p> <p>To support this change, the following message:</p> <p><b>UNV3707E cURL reports could not connect.</b></p> <p>was replaced with:</p> <p><b>UNV6955E Unable to establish an FTP server connection (curl_rc):curl_msg</b></p> <p>where <i>curl_rc</i> and <i>curl_msg</i> are the return code and error message, respectively, that identify the problem.</p> <p>In addition, UFTP now displays the entire connection conversation between it and the Server without requiring the <b>-verbose</b> option.</p>
D-10531	zOS	UDM UDMSRV	<p>Fix an issue where an attempt to transfer PDS members from z/OS using UDM may result in an S0C4 ABEND.</p> <p>When this occurs, the following error is reported:</p> <pre>CEE3204S The system detected a protection exception (System Completion Code=0C4). From entry point UPdsRead at compile unit offset +00000398 at entry offset +00000398 at address 0A5B5030.</pre> <p>Note </p> <p>This problem was introduced by D-08997, delivered in UA 7.1.0.0.</p>
D-10556	zOS	UAGSRV	<p>Fix an issue that prevented a file monitor task from locating datasets when a wildcard is used as the first character in the dataset pattern.</p> <p>This restores behavior that existed prior to Universal Agent 7.0.0.0.</p>
D-10676	All	UFTP	<p>Ensures that UFTP will not crash when used to transfer a comma-separated list of files from z/OS using the MGET command.</p>
D-10687	zOS	UAGSRV	<p>When running a File Transfer Task via a z/OS Agent, if the Local and/or Remote Filename values exceeded 72 characters, UAG Server failed to properly format the SYSIN DD statement in the JCL used to execute UFTP.</p> <p>The z/OS Agent now ensures that such values are properly terminated at column 72 and continued to the next line.</p>

# IBM i Package Maintenance Levels - Agent 7.2.x

Currently, IBM i runs Workload Automation 5.1.1. This page provides information for that version.

## Overview

This page identifies the package contents for the single Workload Automation 5.1.1 for IBM i release, and the maintenance level of every component in that package.

## Workload Automation 5.1.1 for IBM i Packages


Release	Release Date	Universal Broker	Universal Automation Center Agent	Universal Certificate	Universal Command Manager	Universal Command Server	Universal Connector for SAP	Universal Control Manager	Universal Control Server	Universal Data Mover	Universal Database Utilities	Universal Encrypt	Universal Event Monitor	Universal Query
5.1.1.0	February 3, 2021	5.1.1.0			5.1.1.0	5.1.1.0		5.1.1.0	5.1.1.0	5.1.1.0		5.1.1.0		5.1.1.0
5.1.0.0	January 30, 2020	5.1.0.0			5.1.0.0	5.1.0.0		5.1.0.0	5.1.0.0	5.1.0.0		5.1.0.0		5.1.0.0
5.1.0.0	February 28, 2018	5.1.0.0			5.1.0.0	5.1.0.0		5.1.0.0	5.1.0.0	5.1.0.0		5.1.0.0		5.1.0.0
5.1.0.0	January 27, 2012	5.1.0.0			5.1.0.0	5.1.0.0		5.1.0.0	5.1.0.0	5.1.0.0		5.1.0.0		5.1.0.0

### 5.1.1.0 - February 3, 2021

Change ID	Platform	Component	Description
B-12401	IBM i	UBROKER UCMDMGR UCMDSRV UCTLMGR UCTLSRV UDMMGR UDMSRV UENCRYPT UQUERY	<p>Add support for TLS 1.2.</p> <p>This change was made primarily to support new TLS session defaults supplied by the Universal Agent 6.9.0.0 release.</p> <p>Additional items added to support this upgrade include support for the following configuration options:</p> <ul style="list-style-type: none"> <li>min_ssl_protocol</li> <li>require_ssl</li> </ul> <p>These options behave just as their equivalents in our Universal Agent 6.x releases.</p> <p>Additionally, support for the following ciphers is added:</p> <ul style="list-style-type: none"> <li>AES256-GCM-SHA384</li> <li>AES128-GCM-SHA256</li> </ul>
D-07281	IBM i	UDMMGR UDMSRV	Prevent a situation in which a transfer may fail if an assigned process ID is larger than 7 digits.

### 5.1.0.0 - January 30, 2020

Change ID	Platform	Component	Description
-----------	----------	-----------	-------------

B-11354	IBM i	PKG	<p>Certify Workload Automation 5.1.0 release on IBM i 7.2 and IBM i 7.4.</p> <p>Note</p>  <p>A 7.2-compatible installation package was provided for this effort, but no Universal Agent components were changed.</p>
---------	-------	-----	---

### 5.1.0.0 - February 28, 2018

Change ID	Platform	Component	Description
B-08466	IBM i 7.3		Certify Workload Automation 5.1.0 release on IBM i 7.3.

(No component changes for this release.)

# Component Maintenance Levels - Agent 7.2.x

- [Introduction](#)
- [Universal Agent Server](#)
- [Universal Broker](#)
- [Universal Data Mover](#)
- [Universal Extension](#)
- [Universal FTP Client](#)
- [Universal Message Service \(OMS\)](#)

## Introduction



This page summarizes the changes introduced in each component maintenance release for Universal Agent 7.2.x.

For a list of all component changes included in the maintenance release for each platform, see:

- [z/OS Package Maintenance Levels](#)
- [Windows Package Maintenance Levels](#)
- [UNIX Package Maintenance Levels](#)

## Universal Agent Server

### Release 7.2.0.0 - April 1, 2022

Change ID	Platforms	Component	Description
B-13286	z/OS	UAGSRV	<p>Extend the <a href="#">AUTOMATIC_FAILOVER</a> option to support the <b>primary_secondary</b> value, which will instruct a Universal Agent configured with a <a href="#">SYSPLEX_ROLE</a> of <b>primary</b> to start as a <b>secondary</b> Agent if another primary Agent is already running.</p> <p>Note</p>  <p>The <a href="#">AUTOMATIC_FAILOVER</a> option continues to support a default value of <b>never</b>, which will disable automatic failover and will require failovers to be managed manually via a Universal Broker <a href="#">MODIFY</a> command.</p>
B-13287	z/OS	UAGSRV	<p>Extend the <a href="#">AUTOMATIC_FAILOVER</a> option to support the <b>secondary_primary[n]</b> value, where <i>n</i> is an optional numeric value that sets a priority to determine which <b>secondary</b> Agent (among several active secondary Agents) will take over as <b>primary</b>.</p> <p>Note</p>  <p>The <a href="#">AUTOMATIC_FAILOVER</a> option continues to support a default value of <b>never</b>, which will disable automatic failover and will require failovers to be managed manually via a Universal Broker <a href="#">MODIFY</a> command.</p>
B-13288	z/OS	UAGSRV	<p>Added the (mutually-exclusive) <a href="#">ZOS_JOB_SYSAFF</a> and <a href="#">ZOS_JOB_SYSTEM</a> configuration options that can manage a zOS task's execution via a SYSAFF or SYSTEM JOB card parameter, respectively.</p>

B-13292	z/OS	UAGSRV	<p>Extend the <a href="#">AUTOMATIC_FAILOVER</a> option to support the <b>always_primary</b> value, which will force an Agent whose <a href="#">SYSPLEX_ROLE</a> is <b>primary</b> to always start as a Primary Agent. Any other Agent running as a Primary Agent will become a Secondary Agent when this Agent starts.</p> <p>Note</p> <p>The <a href="#">AUTOMATIC_FAILOVER</a> option continues to support a default value of <b>never</b>, which will disable automatic failover and will require failovers to be managed manually via a Universal Broker <a href="#">MODIFY</a> command.</p>
B-14071	Unix	UAGSRV	<p>Add the <a href="#">KILL_PROCESS_TREE</a> option to control how UAG Server responds to a Cancel task command from Universal Controller. When <b>yes</b>, the entire process tree is terminated via SIGTERM. Any process within the tree that is still running after 10 seconds is terminated with a SIGKILL. UAG Server will confirm that all processes in the process tree are terminated before it notifies the Controller of the termination.</p> <p>To preserve compatibility with existing behavior, the default value for this option is <b>no</b>, which can prevent the termination of a process in the tree that ignores the SIGTERM signal. This may cause the task's status in the Universal Controller to show Cancelled although the (now orphaned) process continues to run.</p> <p>Note</p> <p>This new option has no effect on tasks running with sudo authority. Such tasks will not receive a SIGTERM signal and are always terminated immediately with a SIGKILL.</p>
B-14630	Unix Windows	UAGSRV UFTP	<p>Add the ability to retrieve values from the Universal Controller File Transfer Task form that support transfers using explicit FTPS (that is, FTP with SSL).</p> <p>Note</p> <p>Explicit FTPS (FTPES) support was added to the Agent in the 7.1.0.0 release with B-10691. The change delivered in Universal Agent 7.2.0.0 provides full support and integration with the File Transfer Task.</p>
B-14725	Unix Windows	UAGSRV UEXT	<p>Add full support for <a href="#">Universal Monitor</a> tasks, including the ability to reconnect to Universal Extension tasks (executed on behalf of the Monitor task) that continue to run when an Agent is restarted.</p> <p>Note</p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>
D-10379	Windows	UAGSRV	<p>Fix an issue where a File Monitor task running on a Windows Agent fails to recognize Unicode characters.</p>
D-10430	Unix Windows	UAGSRV	<p>When an SAP task instance is cancelled, ensure that the associated Universal Connector for SAP (USAP) process is cancelled as well.</p>
D-10534	Unix Windows	UAGSRV UEXT	<p>UAG Server may crash when a Universal Extension task references a credential token greater than 3000 characters in length.</p> <p>Note</p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>
D-10556	z/OS	UAGSRV	<p>Fix an issue that prevented a file monitor task from locating datasets when a wildcard is used as the first character in the dataset pattern.</p> <p>This restores behavior that existed prior to Universal Agent 7.0.0.0.</p>
D-10559	Unix Windows	UAGSRV	<p>Fix an issue introduced in UA 7.1.0.0, where a Universal Task fails to properly resolve resolvable credentials when the credential variable is enclosed in double quotes.</p>
D-10687	z/OS	UAGSRV	<p>When running a File Transfer Task via a z/OS Agent, if the Local and/or Remote Filename values exceeded 72 characters, UAG Server failed to properly format the SYSIN DD statement in the JCL used to execute UFTP.</p> <p>The z/OS Agent now ensures that such values are properly terminated at column 72 and continued to the next line.</p>

## Universal Broker


### Release 7.2.0.0 - April 1, 2022

Change ID	Platforms	Component	Description
-----------	-----------	-----------	-------------

D-10530	Unix	UBROKER	When the Universal Broker daemon encounters an EPIPE when attempting to log a message to <code>unv.log</code> , close the existing log file and resume logging to a new file.
---------	------	---------	---


## Universal Data Mover







### Release 7.2.0.0 - April 1, 2022

Change ID	Platforms	Component	Description
D-10523	Unix Windows	UDM UDMSRV	<p>Prevent an authentication error for a File Transfer task when the following conditions exist:</p> <ul style="list-style-type: none"> <li>File Transfer task uses Universal Data Mover (UDM)</li> <li>UDM script is used by the task</li> <li>UDM script issues the <code>exec</code> or <code>execsap</code> command</li> <li><code>exec</code> or <code>execsap</code> command uses the <code>pwd</code> parameter</li> <li>One of the built-in credential variables – <code>\$(ops_primary_cred_pwd)</code> or <code>\$(ops_secondary_cred_pwd)</code> -- is used for the <code>pwd</code> parameter's value</li> </ul> <p>For example:</p> <pre>open src=local dst=rmthost.ipaddr user=\$(ops_secondary_cred_user) pwd=\$(ops_secondary_cred_pwd) exec src cmd="dir" user=\$(ops_primary_cred_user) pwd=\$(ops_primary_cred_pwd)</pre> <p>Starting with UA 7.0.0.0, this will cause the resolved <code>\$(ops_primary_cred_pwd)</code> value in the <code>exec</code> statement to be enclosed in double quotes (<code>"</code>). The double quotes are retained when passed to UCMD Manager (or USAP for an <code>execsap</code> statement). The double quotes will prevent successful password authentication.</p>
D-10531	z/OS	UDM UDMSRV	<p>Fix an issue where an attempt to transfer PDS members from z/OS using UDM may result in an S0C4 ABEND.</p> <p>When this occurs, the following error is reported:</p> <pre>CEE3204S The system detected a protection exception (System Completion Code=0C4). From entry point UPdsRead at compile unit offset +00000398 at entry offset +00000398 at address 0A5B5030.</pre> <p>Note </p> <p>This problem was introduced by D-08997, delivered in UA 7.1.0.0.</p>

## Universal Extension

### Release 7.2.0.0 - April 1, 2022

Change ID	Platforms	Component	Description
B-14270	Unix Windows	UEXT	<p>Remove internal DEBUG-level messages that are generated by the Universal Extension base class when the extension task's log level is DEBUG.</p> <p>Only DEBUG messages issued by the extension developer should be shown.</p> <p>Note </p> <p>The HP-UX and z/OS Agents do not provide the Universal Extension.</p>

B-14271	Unix Windows	UEXT	<p>Add the following commands/options to the <a href="#">UIP-CLI</a> utility:</p> <ul style="list-style-type: none"> <li>• <b>task launch</b> - launch a Universal Extension task</li> <li>• <b>task status</b> - obtain the status of a Universal Extension task</li> <li>• <b>task output</b> - obtain the output generated by a Universal Extension task</li> </ul> <p>Note </p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>
B-14544	Unix Windows	UEXT	<p>Make all all <a href="#">Task Instance</a> variables set by the Controller for a Universal Extension task available to the Extension.</p> <p>An extension can access these variables via the <code>self.uip.task_variables</code> dictionary property (e.g., <code>self.uip.task_variables['ops_task_id']</code>).</p> <p>Note </p> <p>The HP-UX and z/OS Agents do not provide the Universal Extension.</p>
B-14720	Windows	UEXT	<p>Add Visual Studio Code Plugin support for the UIP-CLI <b>task</b> commands provided by B-14271 (see above).</p> <p>Note </p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>
B-14724	Unix Windows	UEXT	<p>To support integration with <a href="#">Universal Monitor</a> tasks, receive information from the Controller that can be used to identify an Extension task launched via a <a href="#">Universal Monitor Trigger</a>.</p> <p>Values received from the Controller are saved in the following properties:</p> <ul style="list-style-type: none"> <li>• <code>self.uip.trigger_id</code> - the Trigger UUID value set by the Controller that uniquely identifies the trigger instance. This will be undefined if the extension task was not launched by a Universal Monitor Trigger.</li> <li>• <code>self.uip.instance_id</code> - the EXECID set by the Controller that uniquely identifies the Extension task instance</li> <li>• <code>self.uip.monitor_id</code> - the Universal Monitor UUID that uniquely identifies the Universal Monitor instance. This will be undefined if the extension task was not launched by a Universal Monitor.</li> </ul> <p>The Universal Extension base class sets the following property when a Trigger ID is received:</p> <ul style="list-style-type: none"> <li>• <code>self.uip.is_triggered</code> <ul style="list-style-type: none"> <li>• If the Extension task was executed via a Universal Monitor Trigger, this property will be <b>True</b>. Otherwise, it is <b>False</b></li> </ul> </li> </ul> <p>Note </p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>
B-14725	Unix Windows	UAGSRV UEXT	<p>Add full support for <a href="#">Universal Monitor</a> tasks, including the ability to reconnect to Universal Extension tasks (executed on behalf of the Monitor task) that continue to run when an Agent is restarted.</p> <p>Note </p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>
D-10379	Windows	UAGSRV	<p>Fix an issue where a File Monitor task running on a Windows Agent fails to recognize Unicode characters.</p>
D-10430	Unix Windows	UAGSRV	<p>When an SAP task instance is cancelled, ensure that the associated Universal Connector for SAP (USAP) process is cancelled as well.</p>
D-10534	Unix Windows	UAGSRV UEXT	<p>UAG Server may crash when a Universal Extension task references a credential token greater than 3000 characters in length.</p> <p>Note </p> <p>The HP-UX and z/OS agents do not provide the Universal Extension.</p>
D-10556	z/OS	UAGSRV	<p>Fix an issue that prevented a file monitor task from locating datasets when a wildcard is used as the first character in the dataset pattern.</p> <p>This restores behavior that existed prior to Universal Agent 7.0.0.0.</p>

D-10559	Unix Windows	UAGSRV	Fix an issue introduced in UA 7.1.0.0, where a Universal Task fails to properly resolve resolvable credentials when the credential variable is enclosed in double quotes.
D-10687	z/OS	UAGSRV	When running a File Transfer Task via a z/OS Agent, if the Local and/or Remote Filename values exceeded 72 characters, UAG Server failed to properly format the SYSIN DD statement in the JCL used to execute UFTP.  The z/OS Agent now ensures that such values are properly terminated at column 72 and continued to the next line.

## Universal FTP Client

### Release 7.2.0.0 - April 1, 2022

Change ID	Platforms	Component	Description
B-14036	All	UFTP	Establish a connection to the (S)FTP Server before attempting the requested transfer operation. This will allow connection-specific failures to be isolated and reported.  To support this change, the following message:  <b>UNV3707E cURL reports could not connect.</b>  was replaced with:  <b>UNV6955E Unable to establish an FTP server connection (curl_rc):curl_msg</b>  where <i>curl_rc</i> and <i>curl_msg</i> are the return code and error message, respectively, that identify the problem.  In addition, UFTP now displays the entire connection conversation between it and the Server without requiring the <b>-verbose</b> option.

## Universal Message Service (OMS)

### Release 7.2.0.0 - April 1, 2022

Change ID	Platforms	Component	Description
D-10417	Unix Windows	OMSSRV	Fix an issue that prevents a zOS Agent using IBM System SSL (i.e., RACF-based keyrings) from connecting to an OMS Server.
D-10567	Unix Windows	OMSSRV	When OMS Server's <a href="#">AUTHENTICATE_PEER</a> option is <b>no</b> , fix an issue that will cause OMS to accept an SSL connection when no client certificate is presented, even when an <a href="#">OMS_ACCESS</a> UACL rule exists to reject such connections.