

# One Identity Authentication Services 4.1.5

## Release Notes

### January 2018

These release notes provide information about the One Identity Authentication Services 4.1.5 release.

## About this release

Authentication Services extends the capabilities of UNIX, Linux and Mac systems to seamlessly and transparently join Active Directory and integrate Unix identities with Active Directory Windows accounts.

Authentication Services 4.1.5 is a minor release. Various defects have been resolved and updated in this quarterly maintenance release.

## New features

Authentication Services, the solution that pioneered the "Active Directory Bridge" market continues to lead the way with powerful and innovative new capabilities that make heterogeneous identity and access management even more efficient, secure, and compliant.

Authentication Services 4.1 features include:

- **Upgrade Without Reboot:** Authentication Services adds the functionality required so that future upgrades will no longer require a system reboot when upgrading as a

local user. Some customer deployments of Authentication Services have been running on old versions for long periods of time because of the difficulties of scheduling sever down time. With Authentication Services 4.1 deployed as the foundation, future releases, under some circumstances, will allow you to deploy upgrades without impacting running services or rebooting.

**NOTE:** Because of changes Apple makes to their operating system with new macOS releases, this is not always possible especially when upgrading as a mobile account.

- **IPv6 Support:** Authentication Services now supports hosts running full IPv6 environments. Authentication Services automatically uses IPv6 when it is available; it uses IPv4 when IPv6 is not available or is significantly slower than IPv4. IPv6 is available in Authentication Services on most recent operating systems, but is operating system dependent. Run `vastool info ipv6` to determine whether IPv6 is available on each client. Authentication Services operates in IPv4-only, IPv6-only or dual-stack environments; no special configuration is required. Active Directory servers must be running Windows 2008 or later for IPv6 communication.

Authentication Services uses IPv6 when the operating system's DNS resolver correctly supports mapping of IPv4 addresses to IPv6 addresses. If a problem with address mapping is detected, Authentication Services operates in IPv4-only mode, even if an IPv6 address is assigned and other applications use IPv6.

- **Customizable Windows Components Installer:** The Windows installer now allows you to install individual components. The granule install includes: core components, ADUC components, Group Policy Extensions, Documentation, and the Control Center. For example, you can install an individual MMC snap-in without installing the entire Control Center application. These components are also available as MSI packages for automated and configurable installation.

- **Group Policy Updates:**

- Ability to specify "merge" or "replace" several local file settings in the GPO. For example, you can configure `users.allow` to be delivered to every system with the contents overwriting any changes made to the local copy of `users.allow`.
- A new preference manifest setting for MAC Group Policy called Apple Network Browser that allows you to deactivate AirDrop.

**NOTE:** When upgrading Authentication Services, you must manually add this new preference manifest. Refer to the "Preference Manifest Settings" topic in the *One Identity Authentication Services Mac OS X/macOS Administration Guide* for the procedure "To add a Preference Manifest".

- Ability to distribute trusted certificates through Group Policy.
- **Group Policy for Certificate Autoenrollment:** Authentication Services Certificate Autoenrollment provides a quick and simple way to issue and renew certificates for Mac OS X, UNIX and Linux users and systems from Windows 2008 R2 Certificate Enrollment Services. In this release you can configure Certificate Autoenrollment with Group Policy. Certificate Autoenrollment includes the ability to:

- Automatically enroll x509 Certificates based on Microsoft Certificate Enrollment Policy.
- Renew certificates that are close to expiration according to policy.
- Automatically install newly enrolled certificates into the appropriate system or user keychain.
- Support both user and machine certificate policy.

**NOTE:** In previous releases, Certificate Autoenrollment 1.0 was provided as an add-on and was only available for Mac OS X. Beginning with Authentication Services version 4.1.2, Certificate Autoenrollment 1.1 is included as a standard installable component, `vascert`, available for Mac OS X, UNIX and Linux.

- **Management Console for Unix 2.5 Updates:**

- Ability to manage Privilege Manager for Unix.
- Ability to manage access control on a single host system.
- Ability to add and remove Active Directory users or groups across multiple hosts.
- Ability to rejoin hosts to Active Directory.
- Ability to reset or change passwords for multiple local accounts across multiple hosts.

See also:

- [Resolved issues](#)

## Resolved issues

The following is a list of issues addressed in Authentication Services 4.1.5.

**Table 1: package: resolved issues**

Resolved Issue	Issue ID
Add support for OSX 10.13.	
Re-work systemd support.	692831
	492563
Copy systemd service file over, instead of linking it.	735010

**Table 2: vasd: resolved issues**

Resolved Issue	Issue ID
Full buffer timeout now scales with <code>vascache-ipc-timeout</code> . This provides	724526

Resolved Issue	Issue ID
better handling of heavy loads and reduces kernel load under those situations.	
Provide better handling of password changes through the DS plugin on OSX.	727833
During the ipc connect, handle possible signal interruption.	737912
During Native AC processing, fixed a potential status 224/225 error.	727683
Fixed handling of possible EINTR response.	737912
Fixed an issue with mapped non-Unix user changing their password, introduced by Issue ID 730816 changes.	754277

**Table 3: vastool: resolved issues**

Resolved Issue	Issue ID
Change order of operations during DS configuration.	729789
Change restart and configuration order during DS configuration.	
Restart odmodule in the correct order depending on OS version.	733966
	733967

**Table 4: osx: resolved issues**

Resolved Issue	Issue ID
Fix a potential segfault in DS plugin.	726969
Potential fix for DS plugin crash.	734097
On 10.13.2+, send messages to /var/log/vasd instead of syslog. This should stop vasd hanging on calling syslog. Any messages from vasd, from default to [vasd] debug-level=*, now go to this file.	752224

**i** **NOTE:** If you are using Authentication Services on 10.13.2+, upgrade to this version or later.

**Table 5: auth: resolved issues**

Resolved Issue	Issue ID
During a password login, cache the user's pwdLastSet from their PAC. This prevents the user from being asked to change their password when vasd can not read the correct pwdLastSet value from Active Directory. Set pwdLastSet when expired.	730816

**Table 6: api: resolved issues**

Resolved Issue	Issue ID
In vas_ipc_connect, move from select() to poll().	740839

**Table 7: status: resolved issues**

Resolved Issue	Issue ID
Test 719; fix false positive in global zone.	615449
Add test 724; detect if not in a site.	597853
Test 225; return WARNING if no actual Native AC set.	727684
Test 225; change the output to better explain the issue.	
Test 112; add latest MIT libdefaults settings.	641373
Add text 725; verify computerFQDN has a full name.	752251

**Table 8: krb5: resolved issues**

Resolved Issue	Issue ID
Fix truncating long port number used for getaddrinfo.	751187

**Table 9: vasydpd: resolved issues**

Resolved Issue	Issue ID
Fix a potential vasydpd hang when providing netgroups and services map.	747035

**Table 10: ldapsearch: resolved issues**

Resolved Issue	Issue ID
Add disabling of paged results by setting pr=-1. This allows -f to work for multiple requests.	752215

**Table 11: docs: resolved issues**

Resolved Issue	Issue ID
Removed ReleaseNotes.pdf from the build; all documentation will be kept online, available at: <a href="https://support.oneidentity.com/authentication-services/technical-documents">https://support.oneidentity.com/authentication-services/technical-documents</a>	

## Known issues

The following is a list of issues known to exist at the time of release.

**Table 12: Change Auditor integration known issues**

<b>Known Issue</b>	<b>Issue ID</b>
After installing Authentication Services 4.1.0, the machine must be rebooted for Change Auditor to log "QAS GPO Setting Changed" events.	28008

## System requirements

Before installing Authentication Services 4.1.5, ensure that your system meets the minimum hardware and software requirements for your platform. The operating system patch level, hardware, and disk requirements vary by Unix, Linux and Active Directory platform, and are detailed in the *One Identity Authentication Services Administration Guide*.

Use of RCF 2307 attributes in the user object and for storage of NIS maps requires the installation of the Microsoft Windows Server 2003 R2 schema.

## Product licensing

This product does not require licensing for the evaluation of features. However, Management Console for Unix will notify you if you have not installed a valid license key.

### **To activate a purchased commercial license**

1. Launch and log into Management Console for Unix.
2. Go into **System Settings**.
3. Click **Authentication Services**, then the **Import** button.
4. Browse for the license file and click **OK**.

## Upgrade and installation instructions

The process for upgrading the Authentication Services Windows components from older versions to version 4.1.5 is similar to the installation process. The Windows installer detects older versions and automatically upgrades them. The next time you launch Active Directory Users and Computers, Authentication Services uses the updated Windows components. Refer to the *One Identity Authentication Services Installation Guide* for detailed installation instructions.

Authentication Services allows you to perform all of your Unix identity management tasks from the Authentication Services Control Center. Please refer to the *One Identity Authentication Services Upgrade Guide* for more detailed information about upgrading your

current version of Authentication Services using the Authentication Services Control Center.

Of course, you may perform your Unix client management tasks from the Unix command line, if you prefer. You can find those instructions in the *One Identity Authentication Services Administration Guide*.

## More resources

Additional information is available from the following:

- Online product documentation: <https://support.oneidentity.com/authentication-services/technical-documents>
- One Identity | Privileged Account Management: <https://www.quest.com/community/products/one-identity/f/privileged-account-management>

## Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release is Unicode-enabled and supports any character set. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same locale and regional options. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, Japan.

This release has the following known capabilities or limitations: There is no localization.

# About us

## Contacting us

For sales or other inquiries, visit <https://www.oneidentity.com/company/contact-us.aspx> or call +1-800-306-9329.

## Technical support resources

Technical support is available to One Identity customers with a valid maintenance contract and customers who have trial versions. You can access the Support Portal at <https://support.oneidentity.com/>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product



# Third-party contributions

This product contains some third-party components (listed below). Copies of their licenses may be found at referencing <https://www.oneidentity.com/legal/license-agreements.aspx>. Source code for components marked with an asterisk (\*) is available at <http://opensource.quest.com>.

**Table 13: List of Third-Party Contributions**

<b>Component</b>	<b>License or Acknowledgement</b>
Apache Commons CLI 1.2	<a href="#">Apache License</a> Version 2.0, January 2004 <a href="http://www.apache.org/licenses/">http://www.apache.org/licenses/</a>
Apache Commons Codec 1.4	<a href="#">Apache License</a> Version 2.0, January 2004 <a href="http://www.apache.org/licenses/">http://www.apache.org/licenses/</a>
Apache Commons IO 2.0	<a href="#">Apache License</a> Version 2.0, January 2004 <a href="http://www.apache.org/licenses/">http://www.apache.org/licenses/</a>
Apache Commons Lang 2.5	<a href="#">Apache License</a> Version 2.0, January 2004 <a href="http://www.apache.org/licenses/">http://www.apache.org/licenses/</a>
Bouncy Castle 145	<a href="#">Bouncy Castle 1.5 License</a> Copyright (c) 2000 - 2011 The Legion Of The Bouncy Castle ( <a href="http://www.bouncycastle.org">http://www.bouncycastle.org</a> )
Joda Time 1.6.2	<a href="#">Apache License</a> Version 2.0, January 2004 <a href="http://www.apache.org/licenses/">http://www.apache.org/licenses/</a>
slf4j - Simple Logging Facade for Java 1.7	slf4j license N/A Copyright (c) 2004-2008 QOS.ch All rights reserved.
zt-exec 1.9	<a href="#">Apache License</a> Version 2.0, January 2004 <a href="http://www.apache.org/licenses/">http://www.apache.org/licenses/</a>

## Apache License

Version 2.0, January 2004 <http://www.apache.org/licenses/>

### TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

#### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

**2. Grant of Copyright License.** Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

**3. Grant of Patent License.** Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

**4. Redistribution.** You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- a. You must give any other recipients of the Work or Derivative Works a copy of this License; and
- b. You must cause any modified files to carry prominent notices stating that You changed the files; and
- c. You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- d. If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

**5. Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any

separate license agreement you may have executed with Licensor regarding such Contributions.

**6. Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

**7. Disclaimer of Warranty.** Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

**8. Limitation of Liability.** In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

**9. Accepting Warranty or Additional Liability.** While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

## Bouncy Castle 1.5 License

Please note: our license is an adaptation of the MIT X11 License and should be read as such.

### License

Copyright (c) 2000 - 2011 The Legion Of The Bouncy Castle (<http://www.bouncycastle.org>)  
Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## Copyright 2018 One Identity LLC.

### ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of One Identity LLC .

The information in this document is provided in connection with One Identity products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of One Identity LLC products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, ONE IDENTITY ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL ONE IDENTITY BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF ONE IDENTITY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. One Identity make no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. One Identity do not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

One Identity LLC.

Attn: LEGAL Dept

4 Polaris Way

Aliso Viejo, CA 92656

Refer to our Web site (<http://www.OneIdentity.com>) for regional and international office information.




### Patents

One Identity is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at <http://www.OneIdentity.com/legal/patents.aspx>.

### Trademarks

One Identity and the One Identity logo are trademarks and registered trademarks of One Identity LLC. in the U.S.A. and other countries. For a complete list of One Identity trademarks, please visit our website at [www.OneIdentity.com/legal](http://www.OneIdentity.com/legal). All other trademarks are the property of their respective owners.

### Legend

-  **WARNING: A WARNING icon indicates a potential for property damage, personal injury, or death.**
-  **CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.**
-  **IMPORTANT, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

