



Release Notes

/ Autonomous Identity 2020.10.2

Latest update: 2020.10.2

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Abstract

Notes covering new features, prerequisites for installation, known issues to the software, and other important information for ForgeRock Autonomous Identity.



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About Autonomous Identity Software

ForgeRock® Autonomous Identity is an entitlements analytics system that lets you fully manage your company's access to your data.

These release notes are written for anyone using the Autonomous Identity 2020.10.2 release. Read these notes before you install Autonomous Identity software, especially for production deployments.

Quick Start

 What's New Learn about what's new in this version.	 Before You Start Learn about the requirements for running Autonomous Identity software in production.	 Known Issues Learn about the known issues in this release.
 Check Doc Updates Track important changes to the documentation.	 Release Levels Learn about the Release Levels, upgrades, and stability levels.	 Get Support Find out where to get professional support and training.

Chapter 1

What's New in 2020.10.2

Autonomous Identity 2020.10.2 is a patch release that introduces important bug fixes and improvements.

Important

Autonomous Identity 2020.10.2 introduces an important fix to a security vulnerability found in a third-party component. ForgeRock strongly encourages you to update your {auto.id.name} software. For more information, see "Upgrade Autonomous Identity" in the *Installation Guide*.

Improvements in 2020.10.2

- No new feature improvements were made in this release. Only security bug fixes in third-party components.

Improvements in 2020.10.1

- **Autonomous Identity UI Nginx Tuning Now Reads Large Cassandra Recordset.** For additional information, see [AUTOID-1611: AutoID UI Nginx Tuning to read large cassandra recordset](#).
- **Updated Actions on Application Details Page.** For more information, see [AUTOID-1694: Modify actions on the appDetails page](#).
- **Demo Data Now Includes `app_attributes` and `ent_attributes` Files.** For more information, see [AUTOID-1716: Create app_attributes and ent_attributes files for demo-data](#).
- **Autonomous Identity Now Displays Frequency Given Access Pattern.** Autonomous Identity now shows how many users have a particular entitlement, given an access pattern. For more information, see [AUTOID-1764: Show freq union when access pattern is shown](#).
- **New UI Filtering Method.** Autonomous Identity now uses attribute filters in the Filters tab. For more information, see [AUTOID-1773: Add new filtering method and UI to 10.1 patch](#).

Security Advisories

ForgeRock issues security advisories in collaboration with our customers and the open source community to address any security vulnerabilities transparently and rapidly. ForgeRock's security advisory policy governs the process on how security issues are submitted, received, and evaluated as well as the timeline for the issuance of security advisories and patches.

For details of all the security advisories across ForgeRock products, see *Security Advisories* in the *Knowledge Base*.

Chapter 2

Before You Start

Autonomous Identity server software requires the following hardware and software requirements to run in your production environment. Autonomous Identity's flexible architecture runs in a variety of network environments: on-prem, cloud, multi-cloud, and hybrid.

Files to Download

You deploy Autonomous Identity using a Docker image that pulls other dependent images from the ForgeRock Google Cloud Registry (gcr.io) repository and installs the components on a target node. ForgeRock Autonomous Identity customers must contact ForgeRock for a registry key to download the images. For specific instructions on obtaining the registry key, see [How To Configure Service Credentials \(Push Auth, Docker\) in Backstage](#).

Autonomous Identity requires the following Docker image for installation.

Autonomous Identity Software

Docker Image	Docker Image URL
gcr.io/forgerock-autoid/deployer:2020.10.2	Download the image file from the ForgeRock Google Cloud Repository at https://gcr.io/forgerock-autoid/deployer:2020.10.2 .

Hardware and Memory Requirements

Autonomous Identity has a number of components that include application, data, and analytics servers, which are all included in the Docker images. The minimum hardware and memory requirements for a single-node deployment are as follows:

Table 1: Hardware and Memory Requirements

Vendor	Versions
Application and Data Server	32 GB RAM, 8 CPU
Analytics and Administration Server	64 GB RAM, 16 CPU

Storage Requirements

Autonomous Identity has a number of components that include application, data, and analytics servers, which are all included in the Docker images. The minimum hardware and memory requirements for a single-node deployment are as follows:

Table 1: Hardware and Memory Requirements

Vendor	Versions
Application and Data Server	32 GB RAM, 16 CPU
Analytics and Administration Server	64 GB RAM, 16 CPU

Autonomous Identity requires the following minimum storage requirements:

Table 2: Storage Requirements

Type	Size
Data Storage	1 TB

Operating Systems Requirements

Autonomous Identity is supported on the following operating system:

Table 3: Operating System Requirements

Vendor	Versions
CentOS	7.0

Java Requirements

Autonomous Identity software supports the following Java environments:

Table 4: Java Requirements

Vendor	Versions
OpenJDK	8u262 and higher

Third Party Software Requirements

Autonomous Identity deployments use the following third-party software:

Table 5: Third-Party Software Requirements

Component	Version	Usage
Python	3.6 and higher	Scripts
Docker CE	18.09.1	Container cluster management
Apache Cassandra	3.11.2 and higher	Database for all Autonomous Identity services
Apache Spark	2.4.4 and higher	Cluster to run Autonomous Identity analytics
Mongo DB	4.4	Database for all Autonomous Identity services
HashiCorp Consul	1.7 and higher	Service discovery and configuration server
nginx	1.18 and higher	Reverse proxy for routing HTTPS traffic
Open Distro for Elasticsearch	1.9 and higher	Distributed, open source search engine for all data types.
OpenLDAP	2.4.50 and higher	An LDAP server backend.

Supported Browsers

The following browser is supported for use in production:

Table 6: Supported Browsers

Vendor	Versions
Google Chrome	version 85.0.4183.121 and higher

Autonomous Identity Ports

The following ports are implemented in Autonomous Identity:

Table 7: Autonomous Identity Ports

Port	Protocol	Machine	Description
2376	TCP	Docker	Secure Docker client communication. This port is required for the Docker machine, which orchestrates the Docker hosts.

Port	Protocol	Machine	Description
2377	TCP	Docker	Communication between the nodes of a Docker swarm cluster. Only needed on manager nodes.
7946	TCP/UDP	Docker	Communication among nodes for container network discovery.
4789	UDP	Docker	Overlay network traffic.
7001	TCP	Cassandra	Internode communication.
9042	TCP	Cassandra	CQL native transport.
27017	TCP	MongoDB	Default ports for mongod and mongos instances.
5601	TCP	Open Distro for Elasticsearch	Port to access Kibana.
7077	TCP	Spark	Spark master internode communication port.
40040-40045	TCP	Analytics	Spark driver ports for Spark workers to callback.
443	TCP	Autonomous Identity	Port to access the dashboard and API.
5601	TCP	Autonomous Identity	Port to Kibana.

Chapter 3

Key Fixes

Key Fixes in 2020.10.2

- An important security upgrade was made to fix a vulnerability found in a third-party component.

Key Fixes in 2020.10.1

- AUTOID-1539: Application owner and entitlement owner can take action for all the entitlements
- AUTOID-1561: Deployer Upgrade(2020.9)::OpenLDAP Application owner group is not created
- AUTOID-1570: API large dataset performance issues
- AUTOID-1571: UI large dataset performance issues
- AUTOID-1572: UI issues::2020.10
- AUTOID-1613: Entitlements with / in name causing 404 errors in UI
- AUTOID-1630: UI work for AUTOID-1422
- AUTOID-1645: UI work for AUTOID-1421
- AUTOID-1657: Fix approve/submit button color
- AUTOID-1658: Consistent casing of section headings
- AUTOID-1676: Alter ability to perform actions on user assignments based on permissions
- AUTOID-1700: Upgrade-AutoID 2020.6.3 environment to 2020.10.0
- AUTOID-1701: Build ES endpoints for Identities page
- AUTOID-1702: Build ES endpoints for Entitlements page
- AUTOID-1705: Cassandra certs don't get upgraded in multi-node
- AUTOID-1767: Entitlements page only loading first 100 users for each rule
- AUTOID-1768: Need to increase bucket size in elastic config to resolve large data load issues

Chapter 4

Known Issues

The following is a known issue in this release:

- AUTOID-2209: vault.yml passwords cannot contain special chars & or \$

Chapter 5

Documentation Updates

The following table tracks changes to the documentation set following the release of Autonomous Identity 2020.10.2:

Documentation Change Log

Date	Description
2022-01-24	Added upgrade instructions from 2020.6 to 2020.10. For more information, see "Upgrade from 2020.6.4 to 2020.10.2" in the <i>Installation Guide</i> .
2021-12-21	Initial release of version 2020.10.2. For more information, see " <i>What's New in 2020.10.2</i> ".
2021-12-15	Added an important note to add a line to your <code>jvm.options</code> file to mitigate against a known security bug in a third-party component, and then restart Elasticsearch. For more information, see " <i>What's New in 2020.10.2</i> ".
2021-07-15	Added an install prerequisite that bash must be the default shell for user <code>autoid</code> . For more information, see " <i>Install a Single Node Target</i> " in the <i>Installation Guide</i> .
2021-06-14	Added a known issue about vault passwords not containing special characters, & and \$. For more information, see " <i>Known Issues</i> ".
2021-06-06	Fixed a MongoDB step. For more information, see " <i>Install a Single Node Target</i> " in the <i>Installation Guide</i> .
2021-05-06	Added a prerequisite about enabling IPv4 forwarding in high-security environments. For more information, see " <i>Install a Single Node Target</i> " in the <i>Installation Guide</i> .
2021-01-29	Initial release of Autonomous Identity 2020.10.1 patch release.
2020-10-15	Initial release of Autonomous Identity 2020.10.0.
2020-08-14	Added the initial draft of the <i>Autonomous Identity Deployment Planning Guide</i> .

Appendix A. Release Levels and Interface Stability

ForgeRock defines Major, Minor, and Patch product release levels. The release level is reflected in the version number. The release level tells you what sort of compatibility changes to expect.

Important

Autonomous Identity uses a different version numbering system from other ForgeRock products. The version number use the following format: **Major.Minor.Patch**, where *Major* is the year of the release, *Minor* is the month of the release, *Patch* is the number beginning with 0, and increases for each patch release.

Thus, for this release of Autonomous Identity, the version number is **2020.10.2**.

Release Level Definitions

Release Label	Version Numbers	Characteristics
Major	Version: x[.0.0]	<ul style="list-style-type: none">• Bring major new features, minor features, and bug fixes• Can include changes even to Stable interfaces• Major indicates the year of the release, for example, 2020
Minor	Version: x.y[.0]	<ul style="list-style-type: none">• Bring minor features, and bug fixes• Can include backwards-compatible changes to Stable

Release Label	Version Numbers	Characteristics
		interfaces in the same Major release, and incompatible changes to Evolving interfaces <ul style="list-style-type: none"> • Minor indicates the month of the release, for example, 6 for June
Patch	Version: x.y.z	<ul style="list-style-type: none"> • Bring bug fixes • Are intended to be fully compatible with previous versions from the same Minor release • Patch starts with 0 and increases for each bug fix release

Upgrade and Patching

ForgeRock plans to introduce quarterly upgrades and patches for Autonomous Identity as a service to our customers. Autonomous Identity's architecture supports seamless rolling upgrades to simplify the process.

The following are some general points about upgrades and patches:

- Upgrades and patches are implemented using a simple swap of the underlying container. The operation is zero down-time as long as the cluster has a redundant instance of the microservice.
- Patching does not require schema changes.
- Schema and data migration is achieved automatically using the **cassandra-migrate** tool.

Autonomous Identity schema changes are additive and backward-compatible. This means that during a zero-downtime upgrade, older versions of the container can still write to the new version of the schema. Also, newer versions of the container may alter the tables in a way that preserves the semantics of the previous columns.

- If an upgrade requires a downgrade due to some issue, the downgrade will not restore the previous schema.

More information about upgrading, see *Upgrade Autonomous Identity* in the *Installation Guide*.

ForgeRock Product Stability Labels

ForgeRock products support many features, protocols, APIs, GUIs, and command-line interfaces. Some of these are standard and very stable. Others offer new functionality that is continuing to evolve.

ForgeRock acknowledges that you invest in these features and interfaces, and therefore must know when and how ForgeRock expects them to change. For that reason, ForgeRock defines stability labels and uses these definitions in ForgeRock products.

ForgeRock Stability Label Definitions

Stability Label	Definition
Stable	This documented feature or interface is expected to undergo backwards-compatible changes only for major releases. Changes may be announced at least one minor release before they take effect.
Evolving	<p>This documented feature or interface is continuing to evolve and so is expected to change, potentially in backwards-incompatible ways even in a minor release. Changes are documented at the time of product release.</p> <p>While new protocols and APIs are still in the process of standardization, they are Evolving. This applies for example to recent Internet-Draft implementations, and also to newly developed functionality.</p>
Legacy	<p>This feature or interface has been replaced with an improved version, and is no longer receiving development effort from ForgeRock.</p> <p>You should migrate to the newer version, however the existing functionality will remain.</p> <p>Legacy features or interfaces will be marked as <i>Deprecated</i> if they are scheduled to be removed from the product.</p>
Deprecated	This feature or interface is deprecated and likely to be removed in a future release. For previously stable features or interfaces, the change was likely announced in a previous release. Deprecated features or interfaces will be removed from ForgeRock products.
Removed	This feature or interface was deprecated in a previous release and has now been removed from the product.
Technology Preview	<p>Technology previews provide access to new features that are considered as new technology that is not yet supported. Technology preview features may be functionally incomplete and the function as implemented is subject to change without notice. DO NOT DEPLOY A TECHNOLOGY PREVIEW INTO A PRODUCTION ENVIRONMENT.</p> <p>Customers are encouraged to test drive the technology preview features in a non-production environment and are welcome to make comments and suggestions about the features in the associated forums.</p> <p>ForgeRock does not guarantee that a technology preview feature will be present in future releases, the final complete version of the feature is liable to change between preview and the final version. Once a technology preview moves into the completed version, said feature will become part of the ForgeRock platform. Technology previews are provided on an “AS-IS” basis for evaluation purposes only and ForgeRock accepts no liability or obligations for the use thereof.</p>

Stability Label	Definition
Internal/Undocumented	Internal and undocumented features or interfaces can change without notice. If you depend on one of these features or interfaces, contact ForgeRock support or email info@forgerock.com to discuss your needs.

Appendix B. Getting Support

ForgeRock provides support services, professional services, training through ForgeRock University, and partner services to assist you in setting up and maintaining your deployments. For a general overview of these services, see <https://www.forgerock.com>.

ForgeRock has staff members around the globe who support our international customers and partners. For details on ForgeRock's support offering, including support plans and service level agreements (SLAs), visit <https://www.forgerock.com/support>.

ForgeRock publishes comprehensive documentation online:

- The ForgeRock Knowledge Base offers a large and increasing number of up-to-date, practical articles that help you deploy and manage ForgeRock software.

While many articles are visible to community members, ForgeRock customers have access to much more, including advanced information for customers using ForgeRock software in a mission-critical capacity.

- ForgeRock product documentation, such as this document, aims to be technically accurate and complete with respect to the software documented. It is visible to everyone and covers all product features and examples of how to use them.