



# Automatic Release Automation

ONE Automation

## ARA Plugin for CA CDD User Guide

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**Automatic Software GmbH**

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# 1 About CA Continuous Delivery Director

CA Release Automation Continuous Delivery Director helps you orchestrate a continuous delivery pipeline for quick and dependable application deployments. The ARA Plugin for CA CDD allows you to import the Application model from the integrated ARA instance and start both Application and General Workflows directly from the CA CDD user interface.

See also: <https://docops.ca.com/ca-continuous-delivery-director/6-4/en/>

## 2 About ARA

*Atomic Release Automation is an end-to-end solution for planning, coordinating and automating software release processes, including automated deployment of applications across large-scale server environments.*

### Purpose

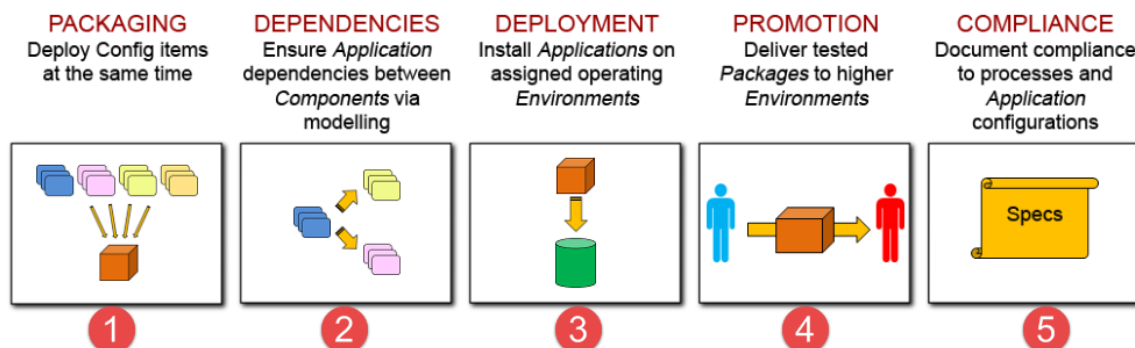
The purpose of Atomic Release Automation is to unify enterprise application and infrastructure automation functionality onto a single platform - without the need of managing multiple tools. Users first architect and control the execution of application process flows, then orchestrate the underlying infrastructure to meet required service levels.

ARA streamlines application release workflow managements for even the most highly-scaled environments while reducing deployment cost across the organization including development, testing and production.

The particular aim is to enable consistent, traceable and auditable deployment for multi-tier applications across heterogeneous and distributed IT infrastructures, reaching from physical or virtual to cloud computing platforms. To improve efficiency, quality and release cycle time, a highly automated system like Atomic Release Automation is preferred.

### Main Functions

ARA does the following:



1. It allows modelling the various components of an application, which are defined as meta-data elements in ARA, with all necessary technical references to the physical elements, and then the packaging of these components for simultaneous deployment. By using the Automation Engine's powerful synchronization capabilities, it is able to deploy, at the same time, the artifacts that are intended to stay together in a single package.
2. As components of an application generally carry important dependencies across one another, ARA provides native capabilities to build those dependencies via modelling tools, so that the application is deployed in the right sequence. A dependency of a component on another can be enforced using ARA's modeling tools, rather than makeshift orchestration mechanisms.
3. ARA deploys the right components to the right environments and it does so natively. Teams no longer have to worry about pushing the proper artifacts to their assigned systems. ARA does that for them.
4. ARA is capable of staging by allowing users to design structured deployment environments. Hence, each environment like DEV, QA and PRODUCTION exists in ARA as distinct entities and

the same component can be deployed seamlessly across these environments without the need for manual handling and configuration.

5. ARA is particularly adept at enforcing governance and compliance. It provides all the necessary tools to comply with a team's internal processes without having to design checks and balances and fail-safe mechanisms. It will further audit deployments to ensure that everything goes smoothly and without error, all the time.

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# 3 Getting Started

## 3.1 Links & Guides

You can find links to resources for CA Release Automation Continuous Delivery Director and Automic Release Automation in the table below.

Component	Link
ARA Plugin for CA CDD	The ARA Plugin for CA CDD can be downloaded from the <a href="#">Automic Marketplace</a> .
Automic Release Automation	ARA v12 can be downloaded from: <a href="http://downloads.automic.com/">http://downloads.automic.com/</a> . Compatibility Information and system requirements can be found on our website Automic Compatibility Matrix ( <a href="https://docs.automic.com/tools/compatibility_checker">https://docs.automic.com/tools/compatibility_checker</a> ). ARA v12 documentation is available at <a href="#">Automic Docs</a>

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# 4 Setting Up the ARA Plugin

## 4.1 Installing the ARA Plugin

*The ARA Plugin for CA CDD can be easily installed with only a few clicks.*


### *To Install the ARA Plugin*

1. Download the ARA Plugin for CA CDD from the [Automic Marketplace](#)
2. Extract the `.war` file to the `webapps` directory of the Tomcat server.
3. Log in to CA Release Automation Continuous Delivery Director.
4. Click the **Administration** tab and select **Plug-ins**.
5. Click **Register Plug-in** at the top-right corner. The **REGISTER PLUG-IN** dialog is displayed.
6. Enter the manifest URL of the ARA plugin in the following format:  
`http://pluginserver:port/plugin-name/manifest.JSON.`
7. Click **Register** to start the installation process.

## 4.2 Adding the ARA Endpoint

*After the ARA plugin has been installed, an endpoint must be configured to gain access to the ARA instance from CA Release Automation Continuous Delivery Director.*

### *To Add the ARA Endpoint*



1. Click the **Administration** tab and select **Endpoints**.
2. Click **Add Endpoint** at the top-right corner. The **ADD ENDPOINT** dialog is displayed.
3. Enter the following information:
  1. Name of the endpoint (e.g. Dev Instance)
  2. Optionally, a description to better identify the endpoint.
  3. From the dropdown list, select one or more users you want to authorize for the endpoint.
  4. Select the **ARA Endpoint** plugin.
  5. In the **Input Parameters** section:
    1. Enter the URL of your ARA REST endpoint. E.g.: `http://192.168.23.125/ara`  
 The URL can be specified as http or https.
    2. Enter the credentials of an ARA user (username in the following format: `client/name/department` and password) with sufficient rights to execute an Application deployment.



4. Click **Test connection** to verify that you can connect to the ARA endpoint.
5. Click **Add**.

## 4.3 Importing ARA Applications and Environments

*You can import Applications and Environments from your ARA endpoint to be used in the release orchestration pipeline.*

-  Note that any changes to the Applications or Environments are to be made directly within your ARA instance.
-  CA Release Automation Continuous Delivery Director will convert any imported ARA Environments with the same name to a single shared environment.


### *To Import Applications*

1. Click the **Administration** tab and select **Applications and Environments**.
  2. Click **Add External Applications**. The **ADD EXTERNAL APPLICATIONS** dialog is displayed.
  3. Select the **ARA** endpoint.
  4. Click **Import**.
- ✓ All the Applications assigned to the login credentials you entered to grant access to your ARA instance are imported. See: [Adding the ARA Endpoint](#).

# 5 Using the ARA Plugin


## 5.1 Creating ARA Tasks

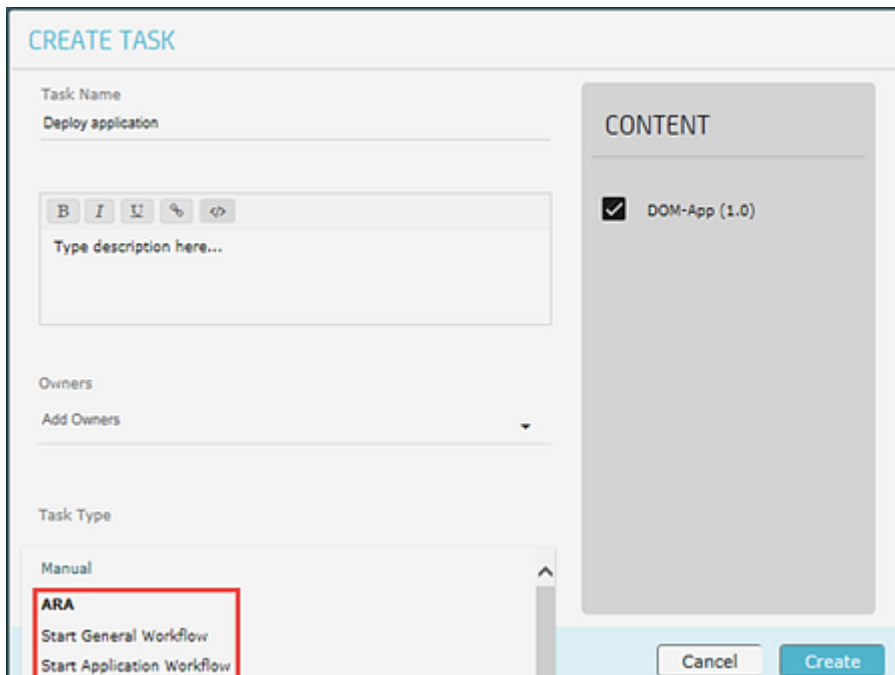
The ARA Plugin for CA CDD provides two types of automatic tasks (Workflows) associated with the release: Start General Workflow and Start Application Workflow.

 For detailed information on how to design and create releases, refer to the official [CA Release Automation Continuous Delivery Director documentation](#).

### To Create an ARA Task

1. Click the **Releases** tab.
2. Click **Create a task...** within the phase of your choice. The **CREATE TASK** dialog is displayed.
3. Enter a task name.
4. Optionally, enter a description to better identify the task.
5. Assign one or more owners to the task.
6. From the **Task Type** dropdown list, select one of the following ARA task types: **Start General Workflows** or **Start Application Workflow**.

 Unlike General Workflows, Application Workflows typically contain only one or more Component Workflows at their highest level. Each Component Workflow, however, contains objects and functions like a General Workflow. Component Workflows orchestrate the deployment of an individual component (or parts of it) on one or more Deployment Targets within an Environment.



The screenshot shows the 'CREATE TASK' dialog box. The 'Task Name' field contains 'Deploy application'. Below it is a rich text editor with the placeholder text 'Type description here...'. The 'Owners' section has an 'Add Owners' button. The 'Task Type' dropdown menu is open, showing 'Manual' selected, and 'ARA' is highlighted with a red box. Below 'ARA' are 'Start General Workflow' and 'Start Application Workflow'. To the right is a 'CONTENT' panel showing a checked checkbox next to 'DOM-App (1.0)'. At the bottom are 'Cancel' and 'Create' buttons.

- Start General Workflow


1. Select the endpoint created to reach the ARA instance (E.g. Dev Instance).
2. Enter the General Workflow you want to be executed.

 The workflow value can be:

- Selected from the list displayed after typing "@" in the field. (E.g. Deploy Tomcat).
- Entered as a token (reusable placeholders used to create generic Workflows) by typing "%" in the field and selecting an option from the list. (E.g last\_successful\_build).
- Entered as free text (alone or together with tokens).

- Start Application Workflow

1. Select the endpoint created to reach the ARA instance (E.g. Dev Instance).
2. Enter the [Application](#), [Application Workflow](#), [Package](#) and [Deployment Profile](#) values.

 The values can be:

- Selected from the list displayed after typing "@" in the field. (E.g. Deploy Tomcat).
- Entered as a token (reusable placeholders used to create generic Workflows) by typing "%" in the field and selecting an option from the list. (E.g last\_successful\_build).
- Entered as free text (alone or together with tokens) .

3. Select an installation mode:

- **Overwrite Existing:** to deploy the Package on every target and overwriting existing components.
- **Skip Existing:** to only deploy the Application on targets where the package has not yet been deployed .

7. Optionally, in the **CONTENT** panel you can select the Application content you want to tie with the completion of the task to keep track of when and where the content is deployed.
8. Click **Create** to create the task.

# 6 About Automic Software, Community and Support

*This topic introduces the Automic Software company and how to leverage the full potential of our solutions to you.*

You can also obtain Automic documentation online from [docs.automic.com](https://docs.automic.com).

## 6.1 About Automic

*Automic Software is dedicated to business automation.*

Automic is the world's most comprehensive platform in automating businesses. Founded 1985, Automic pioneered the largest, independent, globally deployed automation platform which powers the enterprise, application and infrastructure. Now, as the consumerization of IT accelerates, Automic is re-imagining how organizations integrate next generation service models such as Cloud, DevOps and Big Data. Today, our software automates tens of millions of operations a day for over 2,000 customers worldwide. We challenge conventional thinking, enabling our customers to be faster, smarter, in control. Automic – the standard in business automation.

Find out more at our website [www.automic.com](http://www.automic.com).

## Download Center

The Automic Download Center ([downloads.automic.com](https://downloads.automic.com)) is the place where you find product downloads, documentation, release notes and information on new releases and hot-fixes about your Automic solution.

## Marketplace

The [Automic Marketplace \(https://marketplace.automic.com/\)](https://marketplace.automic.com/) features hundreds of business automation templates and solutions for enterprise automation needs including workload automation, service orchestration, DevOps initiatives, big data operations and social media outreach. DevOps engineers can also access a broad range of open-source containers to facilitate rapid application release automation. Users are able to provide ratings, review and feedback on existing plugins, get support and request new plugins.

## Automic Community

Join the Automic Community ([community.automic.com](https://community.automic.com)) to talk with other users from around the world to learn how they optimize their business automation with Automic. Interact with the Automic Team to get ONE Automation tips and tricks straight from the source.

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## Technical Support

Our Technical Support Team ([support@automic.com](mailto:support@automic.com)) is ready to support you, anytime and anywhere. Three support centers located in Europe, the United States, and Asia Pacific build the core of the Automic support organization.

## Training Services

We offer a range of training options on how to get the most out of your Automic solution. Depending on your location, either open training sessions at an Automic Software Service Center, or personalized training sessions at your company's site suits best. Visit the training site and get detailed information about currently offered courses: <http://automic.com/about/training/>

Global Headquarter: Automic Software GmbH, Am Europlatz 5, 1120 Vienna, Austria

## 6.2 Automic Community

*Want to connect with other Automic users to compare notes or learn how others are tackling problems that you're running into?*

Talk with other users from around the world to learn how they optimize their business automation with Automic. Interact with the Automic Team to get ONE Automation tips and tricks straight from the source.

Join the Automic Community ([community.automic.com](http://community.automic.com)) and become an Automic Insider and be among the first to get news about new products and events, even before they are generally announced!

## 6.3 Download Center

*Make sure that you are using our products to their fullest potential.*

The Automic Download Center ([downloads.automic.com](http://downloads.automic.com)) is the place where you find product downloads, documentation and information on new releases and hot-fixes about your Automic solution. It's all in one place: from service hotfixes, release notes, and all guides. You will also find patch descriptions, known bugs or workarounds.

## 6.4 Marketplace

*Access largest marketplace of templates and solutions for automating any part of your enterprise!*

The [Automic Marketplace \(https://marketplace.automic.com/\)](https://marketplace.automic.com/) features hundreds of business automation templates and solutions for enterprise automation needs including workload automation, service orchestration, DevOps initiatives, big data operations and social media outreach. DevOps engineers can also access a broad range of open-source containers to facilitate rapid application release automation. Users are able to provide ratings, review and feedback on existing plugins, get support and request new plugins.

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## 6.5 Technical Support

*We have a support team you can trust.*

Our team of professionals is ready to support you, anytime and anywhere. Three support centers located in Europe, the United States, and Asia Pacific build the core of the Automic support organization.

Our Technical Support Team ([support@automic.com](mailto:support@automic.com)) makes sure that your closest Automic experts are never more than a few hours flight away, no matter on which continent your subsidiaries and data centers are located. Automic software is designed to provide global connectivity for international companies. You are employing Automic software on a global scale and therefore you can expect global service.

The table below provides more information on the files the Technical Support team may need to assist you efficiently:

Possible issue	Useful information
Agent start up	<ul style="list-style-type: none"> <li>Agent logs</li> <li>SMGR logs (in case SMGR is used to start the component)</li> </ul>
Agent crash	<ul style="list-style-type: none"> <li>Agent logs</li> <li>OS Memory Dumps (Windows and Unix) and Systemlogs (eventviewer on Windows &amp; dmesg / syslog / etc. on Unix)</li> <li> Make sure that the automated dump file generation is enabled.</li> <li>SMGR logs (in case SMGR is used to start the component)</li> </ul>
Job & other task issues	<ul style="list-style-type: none"> <li>Job information: XML export of the object and its dependencies, 'Job Details' window, Job reports and execution history (Statistics)</li> <li>Messages</li> </ul>
WP/CP start up	<ul style="list-style-type: none"> <li>Server logs (CP / WP)</li> <li>SMGR logs (in case SMGR is used to start the component)</li> </ul>
WP / CP crash	<ul style="list-style-type: none"> <li>OS Memory Dumps (Windows and Unix) and Systemlogs (eventviewer on Windows &amp; dmesg / syslog / etc. on Unix)</li> <li> Make sure that the automated dump file generation is enabled.</li> <li>Server logs (CP / WP)</li> <li>SMGR logs (in case SMGR is used to start the component)</li> </ul>
UI issues	<ul style="list-style-type: none"> <li>UI logs: include Automic logs as well as Application Server logs.</li> </ul>
Privileges (e.g. access denied,...)	<ul style="list-style-type: none"> <li>Messages</li> <li>Job information: XML export of the object and its dependencies, 'Job Details' window, Job reports and execution history (aka Statistics)</li> </ul>
General performance issue	<ul style="list-style-type: none"> <li>Server logs (CP / WP)</li> </ul>
Performance issues on AE tasks	<ul style="list-style-type: none"> <li>Job information: XML export of the object and its dependencies, 'Job Details' window, Job reports and execution history (Statistics)</li> </ul>
Utilities	<ul style="list-style-type: none"> <li>Utility logs &amp; all input and output files.</li> </ul>

Agent-Agent or Agent-  
Server Connectivity issues

- Agent logs
- Server logs (CP / WP)

## 6.6 Training Services

*Do you want to learn even more about Automic solutions?*

We offer a range of training options on how to get the most out of your Automic solution. Depending on your location, either open training sessions at an Automic Software Service Center, or personalized training sessions at your company's site suits best. Visit the training site and get detailed information about currently offered courses.

See also: <http://automic.com/about/training/>