Automic

Let's Automate Business.

Automic Release Automation

ONE Automation

JIRA Plugin User Guide

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Contents

1 Introduction

The JIRA Plugin provides a simple-to-use solution to integrate JIRA and Automic Release Automation for execution management, which helps users to trigger a full-scale execution without direct access to the ARA interface.

Deployment requests created in JIRA are forwarded to and executed by the Automic Release Automation. The execution can be managed via *Issues* in JIRA.

The JIRA Plugin provides two new types of JIRA issues:

- Application Deployment/Provisioning Request
- General Deployment Request

The interactions between JIRA and Automic Release Automation are explained below:
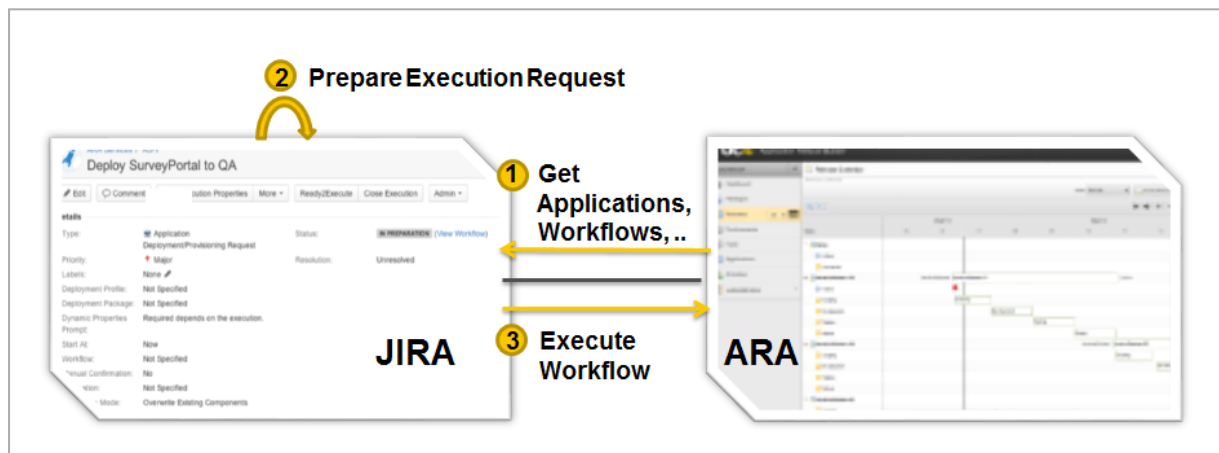
You start from a JIRA project which is configured to handle deployment issues using a dedicated JIRA workflow. While you create the deployment request issue, JIRA requests applications including components, properties and ARA workflows from Automic Release Automation (ARA). Finally, you can trigger the ARA workflow execution from the JIRA user interface.

1.1 Target Audience

Readers should know about the administration of JIRA and *Automic Release Automation*.

1.2 About JIRA

JIRA is an issue-based project tracking software by Atlassian.

With JIRA you can capture and organize issues, prioritize them and take action on what is important. Furthermore you can stay up-to-date with the actions needed in order to fulfill the development, enhancement and fixing in project teams.

See also: https://www.atlassian.com/software/jira

1.3 About ARA

Automic 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 and covers all mentioned use cases.

Purpose

The purpose of Automic 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 Automic Release Automation is preferred.

Main Functions

ARA does the following:
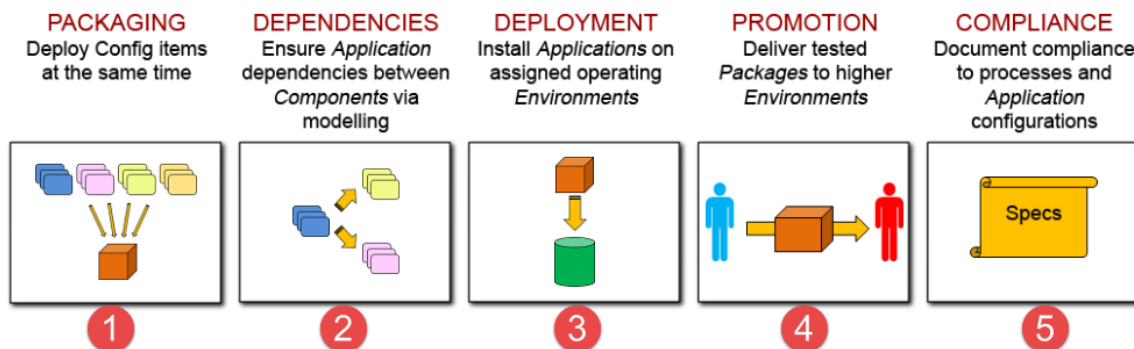
1. It allows modelling the various components of an application, which are defined as meta-data elements in ARA, with all necessary technical references to the physical elements, and then the packaging of these components for simultaneous deployment. By using the Automation Engine's powerful synchronization 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.

2 Getting Started

2.1 Links & Guides

You can find links to resources for JIRA and Automic Release Automation in the table below.

Component	Link
JIRA	The JIRA Plugin can be downloaded from the Automic Marketplace.
Automic Release Automation	You can download ARA v12 from: http://downloads.automic.com/.
	Compatibility Information and system requirements can be found on our website Automic Compatibility Checker (https://docs.automic.com/tools/compatibility_ checker).
	ARA v12 documentation is available on Automic Docs
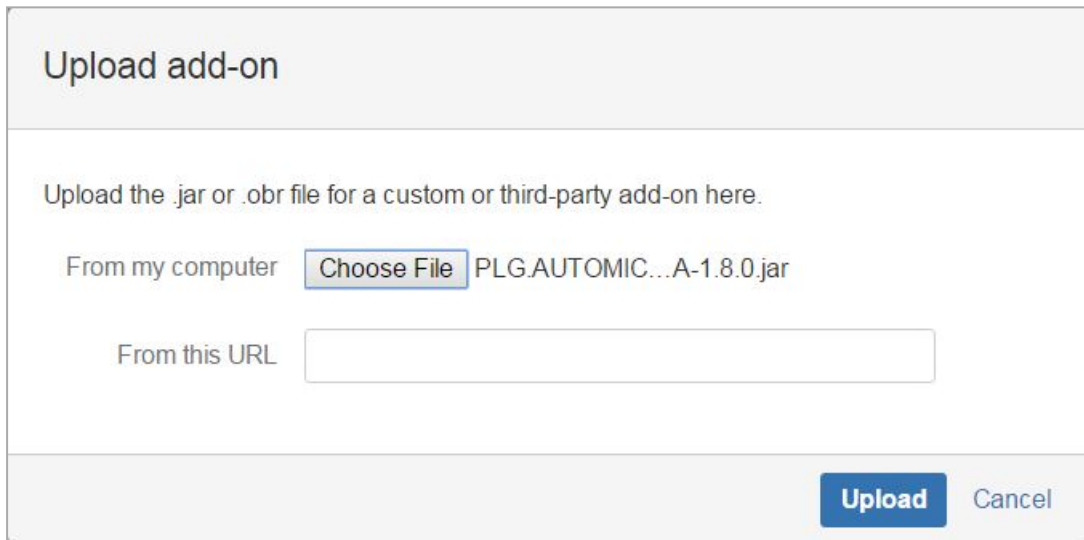
3 Setting up the JIRA Plugin

3.1 Installing the JIRA Plugin

During installation you import the plugin and set up the connectivity to Automic Release Automation.

To install the JIRA Plugin

1. Download the JIRA Plugin from the Automic Marketplace.
2. Extract the `.zip` file to the folder.
3. Open the JIRA administration interface.
4. Navigate to **Add-ons** > **Manage add-ons** > **Upload add-on**.
5. Click **Choose File** and browse to the extracted `PLG.AUTOMIC_ATLASSIAN_JIRA-(Version number).jar` file (e.g. PLG.AUTOMIC_ATLASSIAN_JIRA-1.8.0.jar).

6. Click **Upload**.

3.2 Configuring the Plugin Integration

The JIRA Plugin provides a configuration page in the JIRA administration area.

To Configure the Integration

1. Open the JIRA administration interface.
2. Navigate to **Add-ons** > **Automic Release Automation** > **Configuration**
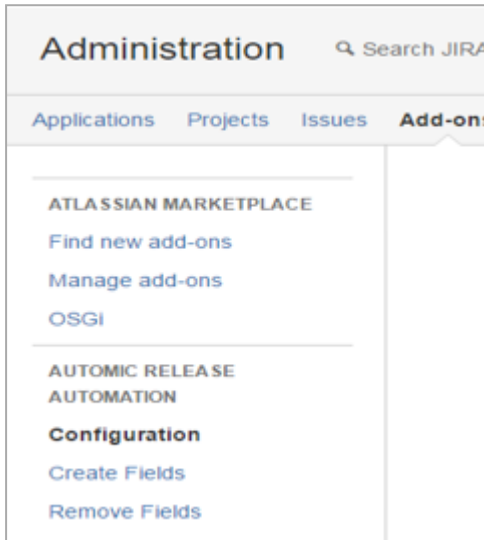
3. Configure the connectivity parameters as follows:
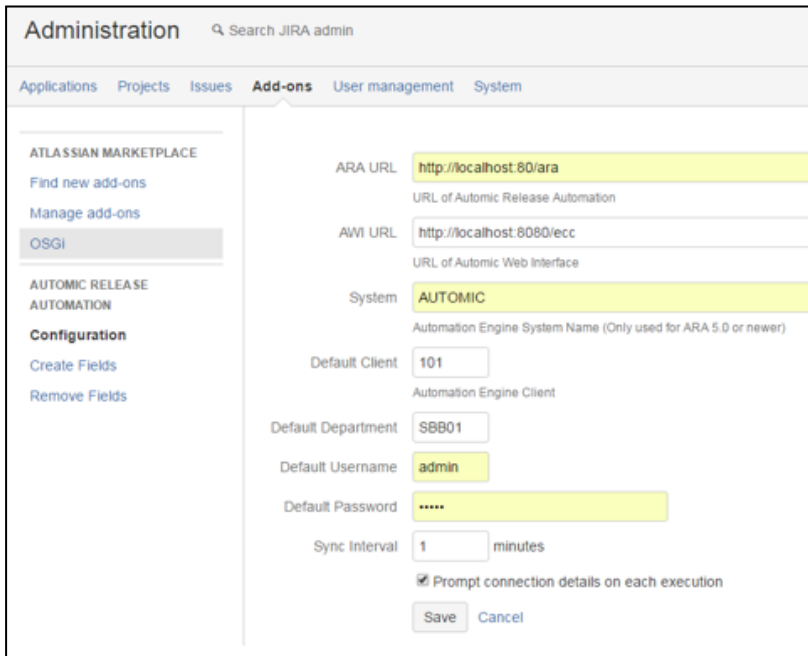
- **ARA URL**: default URL of Automic Release Automation e.g. `http://localhost/ARA`.
- **AWI URL**: default AWI URL e.g. `http://localhost:8080/awi`.

- **System**: default Automic system e.g. AUTOMIC.
- **Default Client**: Automation Engine client e.g. 1
- **Default Department**: default department (part of credentials to access the Automic Release Automation) e.g. SBB01.
- **Default Username**: e.g. admin
- **Default Password**
- **Sync Interval**: time in minutes until the state of the execution is fetched from Automic Release Automation e.g. 1.
- Select the **Prompt connection details on each execution** checkbox if you want the login information to be prompted after a user clicks on the ARA Execution Properties of the specified issue for the first time.
  If this option is unchecked, the default login information provided in the plugin configuration will be used.

4. Click **Save** to save the configuration.
5. Click **Create Fields** under **Configuration** to generate the required fields for ARA.

6. Select the **Overwrite existing** checkbox if you want to overwrite the already existing fields.
7. Click **Generate**.

3.3 Creating and Configuring the JIRA Project

This section describes how to create and configure a project in JIRA to handle request issues and execute deployments in ARA.
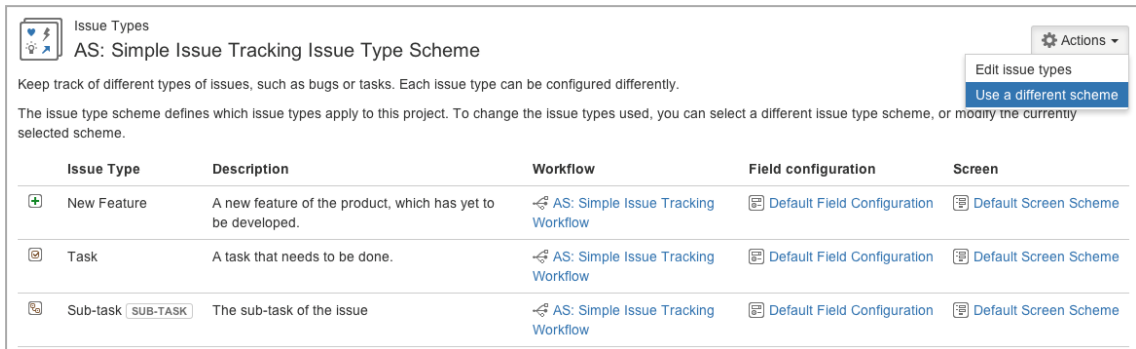
To Create and Configure a Project in JIRA

1. Navigate to **Projects** > **Create Project**. The **Project management** dialog is displayed.

2. Name the project **ARA Services**.
3. Enter a project key to be used as the prefix of this project's issue keys. (E.g. AS).
4. Click **Submit**. The project is created.
5. Let's now configure the project to handle deployment request issues. To do so, go to **Administration** > **Project** and select the **ARA Services** project.

6. In the **Issue Types** section, click the name of the default scheme.

7. Click the **Actions** dropdown menu and select **Use a different scheme**.

8. Select the **Choose an existing issue type scheme** radio button.
9. Select the **ARA Issue Type Scheme** from the dropdown list.
10. Click **OK**.

11. In the **Workflows** section, click the name of the default scheme.
12. Click **Switch Scheme** to display the **Associate Workflow Scheme to Project** page.

13. Select the **ARA Workflow Scheme** from the **Scheme** dropdown list.

14. Click **Associate** to begin the process.

15. Click **Associate** to confirm that there are no issues to migrate.
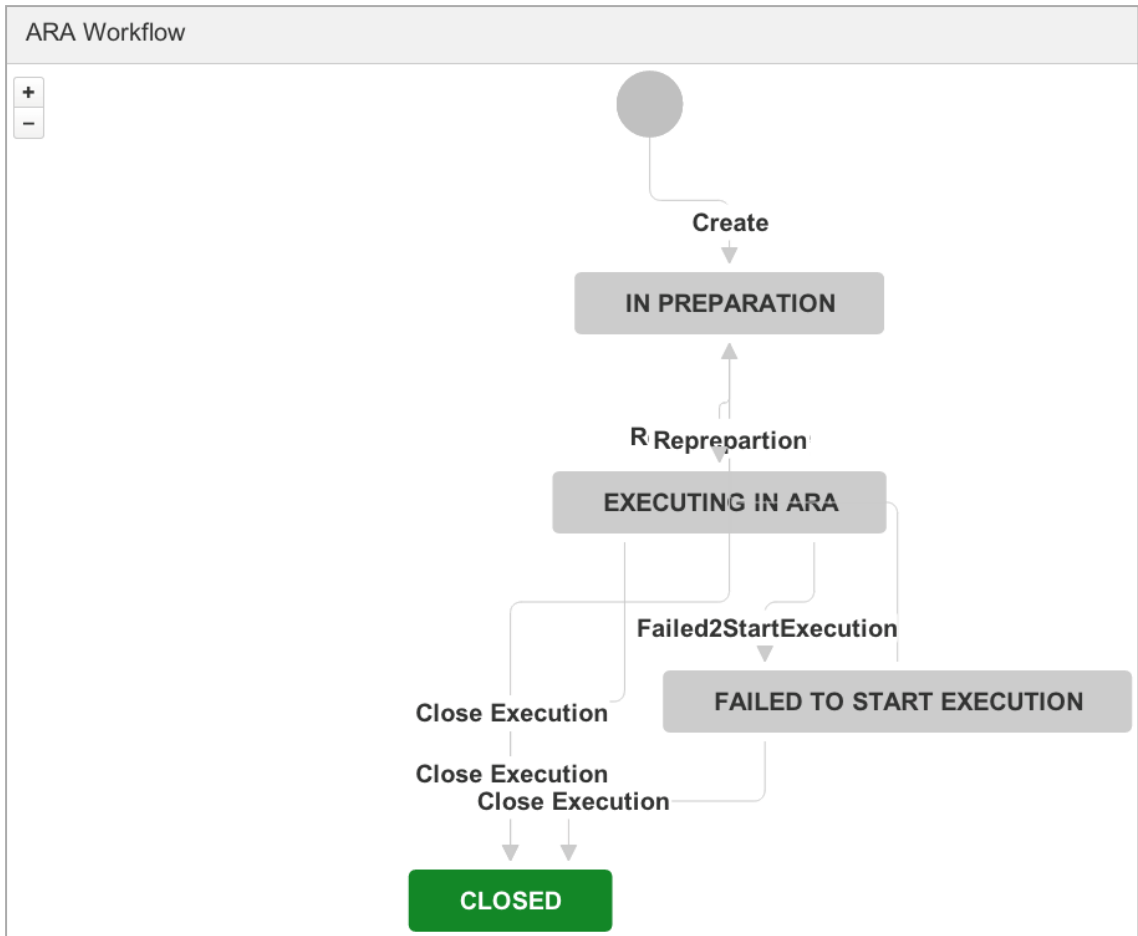16. Click **Acknowledge** to finish the process.

ARA Workflow

ARA Workflow

From	Transition		To
IN PREPARATION	Ready2Execute 📄 ARA Application Deployment Screen	→	EXECUTING IN ARA
	Close Execution 📄 ARA Application Deployment Screen	→	CLOSED
EXECUTING IN ARA	Failed2StartExecution No Screen	→	FAILED TO START EX...
	Close Execution No Screen	→	CLOSED
FAILED TO START EX...	Reprepartion No Screen	→	IN PREPARATION
	Close Execution 📄 ARA Application Deployment Screen	→	CLOSED
CLOSED	There are no transitions out of this status		

Close

17. Let's now define the associated type screen scheme. In the **Screens** section click the name of the default scheme.

18. Click the **Actions** dropdown menu and select **Use a different scheme**.
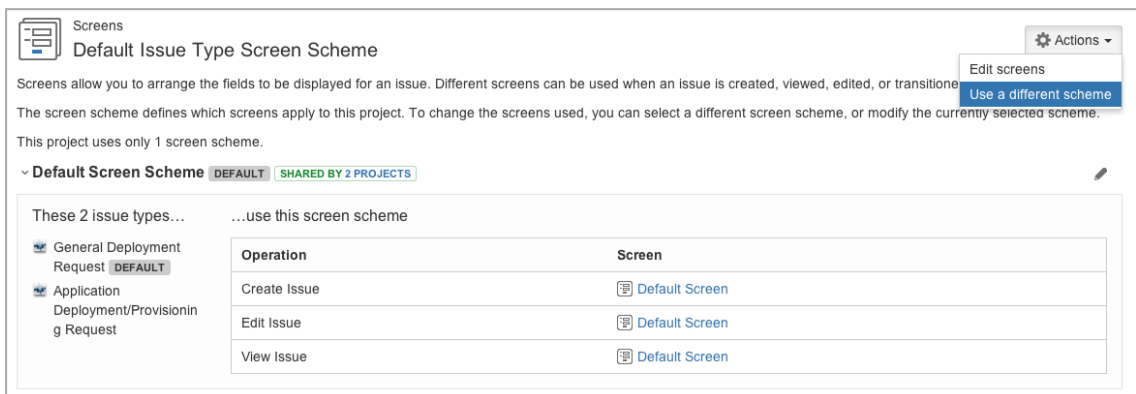
19. Select the **ARA Issue Type Screen Scheme** from the dropdown list.
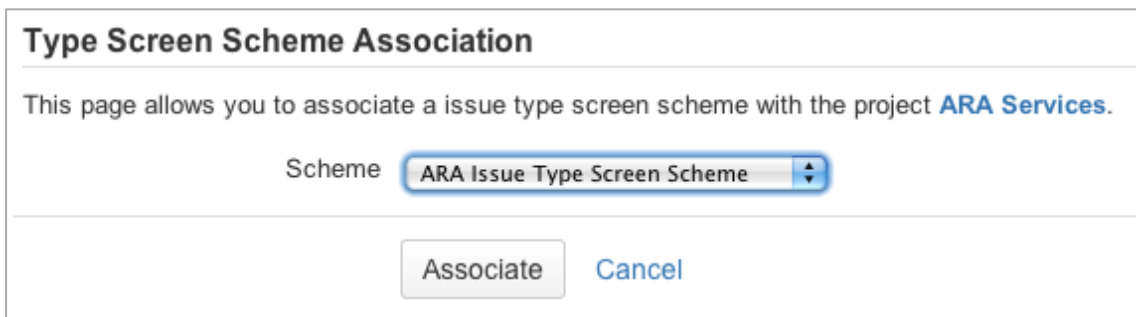
20. Click **Associate**.
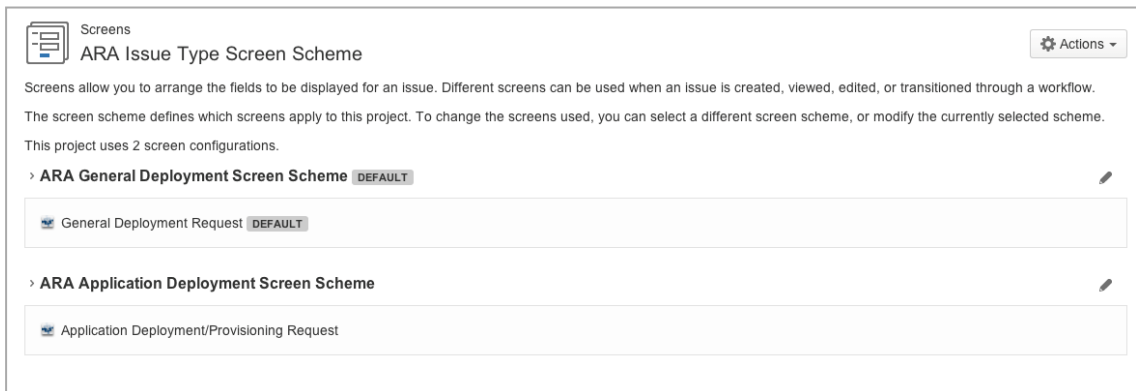
21. In the **Fields** section, click the name of the default scheme.

22. Click the **Actions** dropdown menu and select **Use a different scheme**.

23. Select the **ARA Field Config Scheme** from the dropdown list.

24. Click **Associate**.

 Optionally, you can customize issue types, workflows, screens, and fields manually by creating your own schemes (see JIRA documentation).

3.4 Installation Checklist

Administration of JIRA Plugin is kept to a minimum. All necessary administrative configuration is done right after installation when you set up a JIRA project.

After a successful installation, the following entities should be available in JIRA:

Type	Entity
Issue types	Application Deployment/Provisioning Request
	General Deployment Request
Issue Type Schemes	ARA Issue Type Scheme
Custom Fields (read only text field)	Application
	Deployment Package
	Deployment Profile
	Dynamic Property Prompt
	Execute At
	In Queue
	Installation Mode
	Manual Confirmation
	Select User/Group
	Start At
	Workflow
Field Configurations	ARA Field Config
Field Configuration Schemes	ARA Field Config Scheme
Screens	ARA Application Deployment Screen
	ARA General Deployment Screen
Screen Schemes	ARA Application Deployment Screen Scheme
	ARA General Deployment Screen Scheme
Issue Type Screen Schemes	ARA Issue Type Screen Scheme
Workflows	ARA Workflow
Workflow Schemes	ARA Workflow Scheme
Status	In Preparation
	Executing in Automic Release Automation
	Failed to Start Execution

4 Updating the JIRA Plugin

Updates can be performed by simply uninstalling the existing version of the plugin and installing a new one.

To update the JIRA Integration

1. In the JIRA **Administration** page, navigate to **Manage Add-ons**.

2. To uninstall the existing version of the JIRA Plugin, click **Uninstall**.

> In case one or more issues of the ARA types is/are associated with a project, you need to revoke the association of the schemes (workflow, field, screen etc) before uninstalling the plugin. To do so, click **Remove Fields** in the left pane.

3. After successfully uninstalling the JIRA Plugin, you can install a new version of the plugin by following the steps described in this topic: Setting up the JIRA Plugin.

5 Using the JIRA Plugin

The following topics are described within this section:

5.1 Workflows for ARA Requests

The integration provides the following two issue types:

- *Application Deployment/Provisioning Request* - associated to a deployment workflow/execution in Automic Release Automation.
- *General Deployment Request* - associated to a general workflow/execution in Automic Release Automation.

Both issue types trigger the same JIRA workflow (see state flow diagram below).

The state transition behaves as follows:
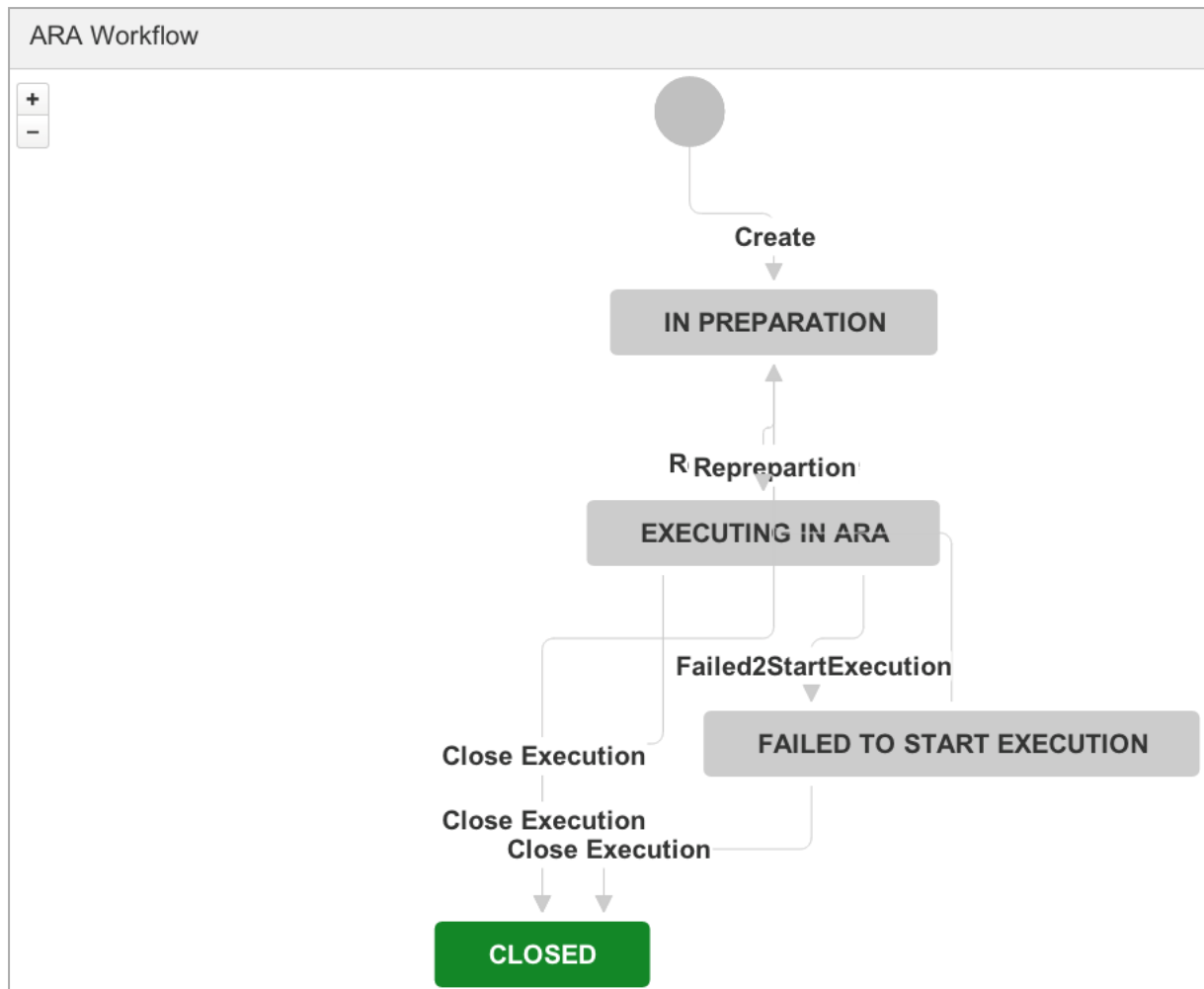
1. *Create*: when you create a new issue of type *Application Deployment/Provisioning Request* or *General Execution Request*, the following dialogs appear:
    1. In the first dialog, you have to enter your Automic Release Automation credentials (only once per session).
    2. In the second dialog you can edit the request issue.
2. *In Preparation*: once the issue has been created, the state switches to *In Preparation*. You can edit the details in the JIRA details issue page.
3. The transition from *In Preparation* to *Ready to Execute* triggers the creation of a new *Execution* in the Automic Release Automation:
    - If the execution fails to start, the issue state changes to *Failed to Start Execution*
    - If the execution starts successfully, the follow-up states are updated.
4. *Closed* issues with state "closed" cannot be reopened.

5.2 Creating Automic Release Automation Entities

In Automic Release Automation create or review the following entities:

- Application (e.g. SurveyPortal) including its components.
- Environment (e.g. QA) with deployment target.
- Workflow (e.g. Deploy SurveyPortal to QA).
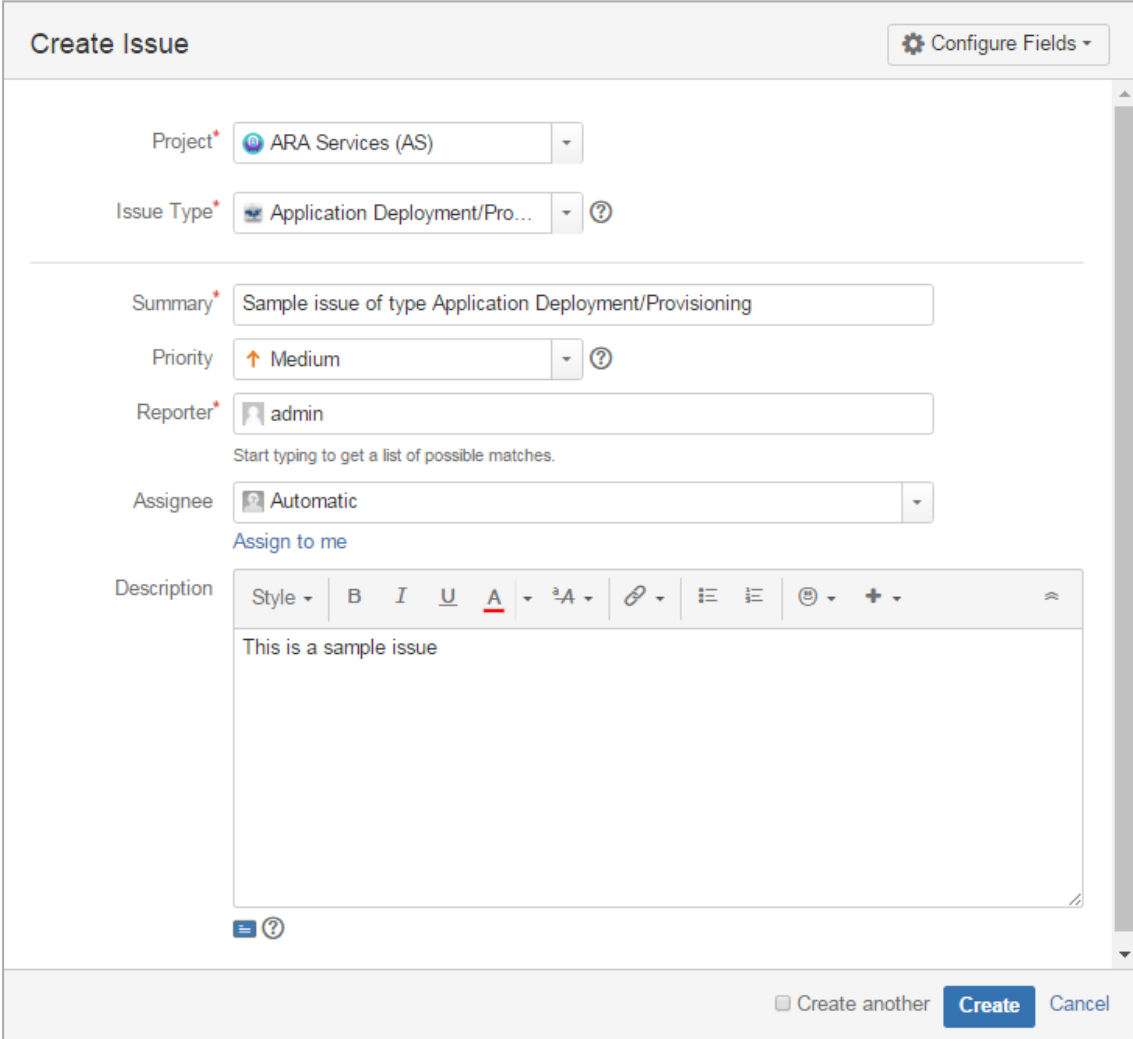
ⓘ To know more see the Automic Release Automation documentation on Automic Docs.

5.3 Creating an *Application Deployment/Provisioning Request* Issue

The steps below show how easy it is to create a new application deployment/provisioning request issue in JIRA.

To start an Application Deployment/Provisioning Request from the JIRA User Interface

1. Log in to JIRA.
2. Navigate to the JIRA project which is configured for deployment issues. E.g. the ARA Services project.
3. Click **Create** at the top of the screen to create a new JIRA issue.
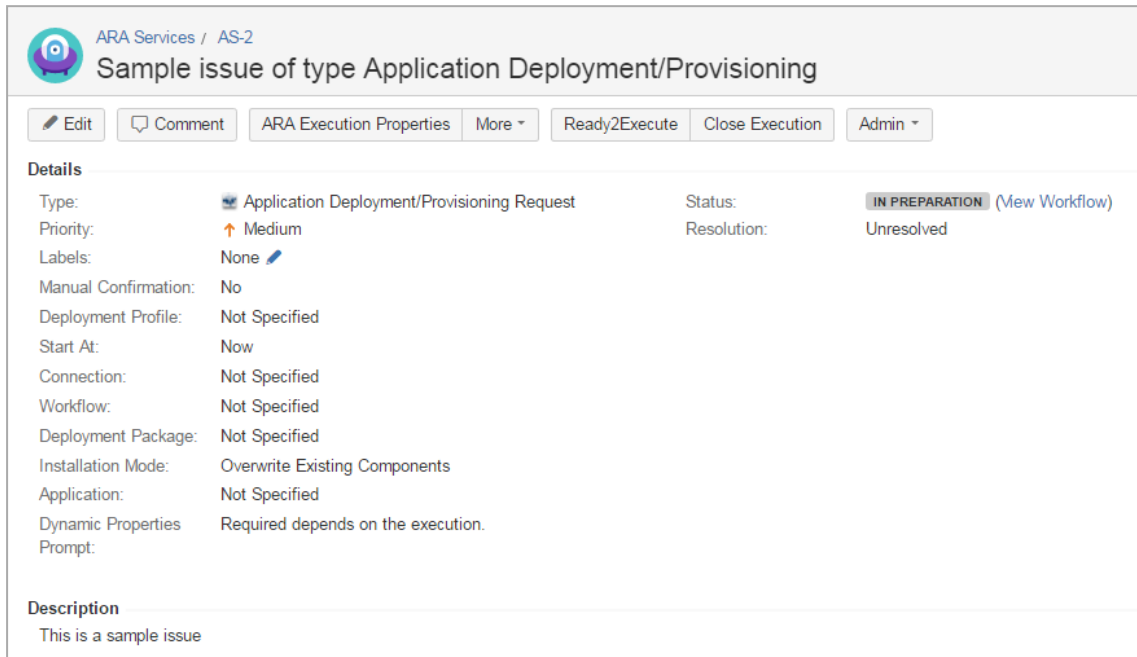
4. Select the *Application Deployment/Provisioning Request* issue type, which is used to trigger an application workflow in Automic Release Automation.
5. Enter a summary text.

6. Select a reporter's name.
7. Optionally: add a description.
8. Click **Create** to finish the process.
9. As a result, a new issue is created with initial state "in preparation".

10. In the issue view, click **ARA Execution Properties**.
11. If not done previously, a dialog is displayed to enter the required Automic Release Automation credentials. Fill them in.

> If the plugin configuration option **prompt connection details on each execution** is unchecked, the default login information provided in the plugin configuration will be used.

12. Click **Login**.

13. After logging in, the plugin fetches all the necessary entities from Automic Release Automation.

14. Select an application from the **Application** dropdown list.
    Once an application is selected, the workflow dropdown field is activated.
15. Select a workflow from the **Workflow** dropdown list.
    The properties of the application/components are filled automatically into the ticket fields. (e.g., environment/deployment profile, deployment package name).

    ⓘ For provisioning workflows, the **Profile** field is disabled.
    Provisioning applications and workflows are marked with (*).

16. **Execute At**: select the start of the execution to either *Now*, *At* a specified date/time or *In Queue*.
    • To schedule the start of the execution for a specified date/time, you can enter the desired date and time into the field **Execute At**.
    • To schedule the start of the execution in a queue, you can select the queue from the **Queue** dropdown list.
17. If you require an Automic Release Automation user to confirm (approve) the start of the execution, select the option *Yes* for **Manual Confirmation** and the Automic Release Automation user from

the dropdown list in the **User/Group** field.

18. **Installation Mode**: you can select if the existing components can be overwritten (*Overwrite*) or if they remain unchanged *(Skip)*.

19. **Properties Button**: you can set the dynamic prompt properties for the selected application, workflow or package if they are defined in ARA. These properties can also be set by clicking the **More** button and then the **Prompt Properties** option.

20. Click **Save** to persist the configuration in JIRA.

5.4 Creating a General Deployment Request Issue

The steps below describe how to create a new General Deployment Execution Request Issue in JIRA.

To start a General Deployment Request from the JIRA User Interface

1. Log in to JIRA.
2. Navigate to the JIRA project which is configured for deployment issues. E.g. the ARA Services project.

3. Click **Create** at the top of the screen to create a new JIRA issue.

4. Select the *General Deployment Request* issue type, which is used to trigger a general workflow in Automic Release Automation.
5. Enter a summary text.
6. Select a reporter's name.
7. Optionally: add a description.
8. Click **Create** to finish the process. As a result, a new issue is created with initial state "in preparation".
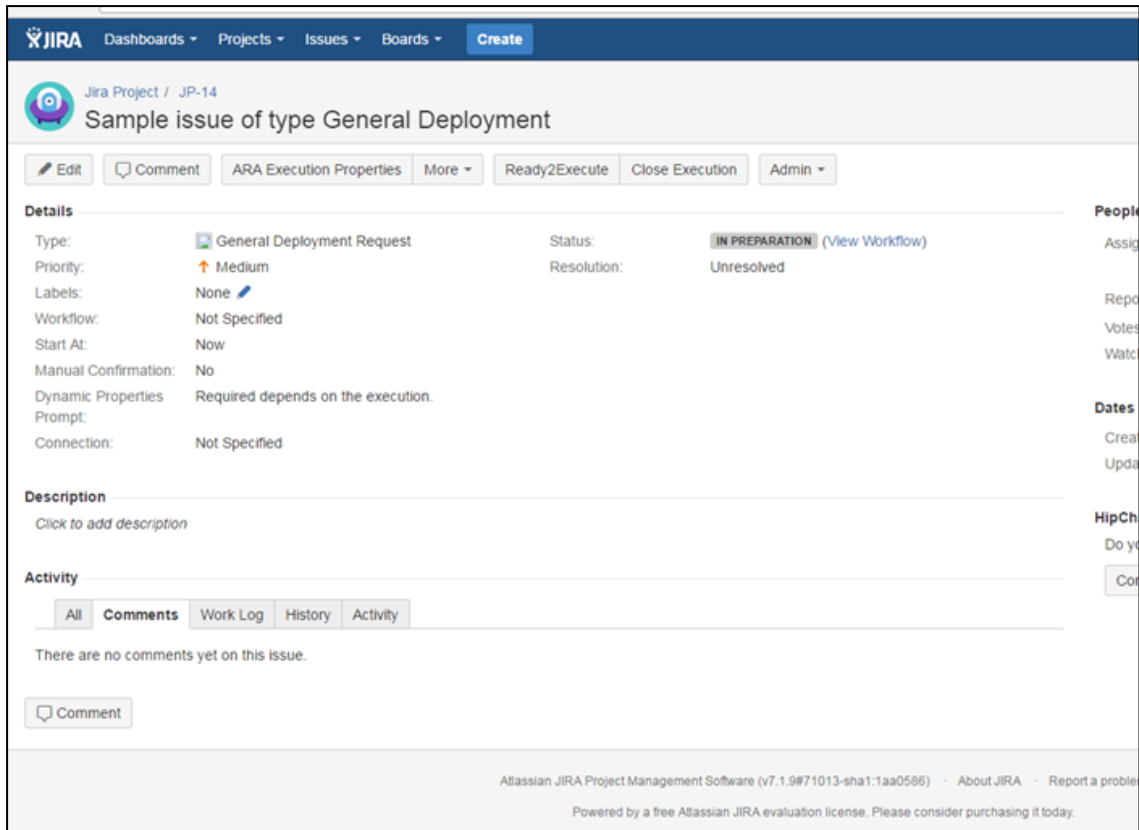
9. In the issue view, click **ARA Execution Properties**.
10. If not done previously, a dialog is displayed to enter the required Automic Release Automation credentials. Fill them in.

    ⓘ If the plugin configuration option **prompt connection details on each execution** is unchecked, the default login information provided in the plugin configuration will be used.
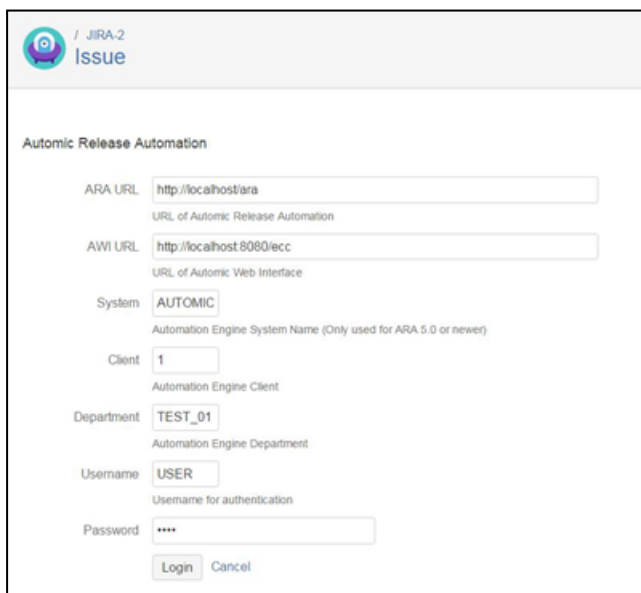
11. Click **Login**.

12. After logging in, the plugin fetches all the necessary entities from Automic Release Automation.

13. Select a workflow from the **Workflow** dropdown list.
14. **Execute At**: select the start of the execution to either *Now*, *At* a specified date/time or *In Queue*.
    - To schedule the start of the execution for a specified date/time, you can enter the desired date and time into the field **Execute At**.
    - To schedule the start of the execution in a queue, you can select the queue from the **Queue** dropdown list.
15. If you require an Automic Release Automation user to confirm (approve) the start of the execution, select the option *Yes* for **Manual Confirmation** and the Automic Release Automation user from the dropdown list in the **User/Group** field.
16. **Installation Mode**: you can select if the existing components can be overwritten (*Overwrite*) or if they remain unchanged (*Skip*).
17. **Properties Button**: you can set the dynamic prompt properties for the selected application, workflow or package if they are defined in ARA. These properties can also be set by clicking the **More** button and then the **Prompt Properties** option.

18. Click **Save** to persist the configuration in JIRA.

5.5 Starting the Execution from JIRA

When you start the execution, the issue changes from state In Preparation to Ready to Execute.

ℹ️ For detailed information on workflow executions, see also the *Automic Release Automation User Guide*, section *Working with Executions*.

⚠️ After the execution is created in the Automic Release Automation, the input fields cannot be edited anymore.

To Start the Execution from JIRA

1. Go to the JIRA issue page.
2. You can finish the ticket preparation by clicking **Ready2Execute**.

3. Before starting the execution in Automic Release Automation, the Automic Release Automation plug-in displays a dialog. Fill in the fields and confirm the prompts and the dynamic properties.

4. In the following *Ready2Execute* dialog, you might add a comment.

5. To confirm the state change to *Ready2Execute*, click **Ready2Execute**. This triggers the execution in the Automic Release Automation.

As a result, you will be directed to the JIRA issue view.

6. When the execution is performed in the Automic Release Automation, the state *finished successfully* is reported to JIRA and displayed in the **Activity** section.

5.6 Searching for Deployment Issues in JIRA

The JIRA Plugin provides specific search functionality.

To Search for Deployment Issues

1. Log in to JIRA.
2. Navigate to **Issues** (in header) > **Search for Issues**.

3. Check the deployment states in the **Status** filter dropdown list.
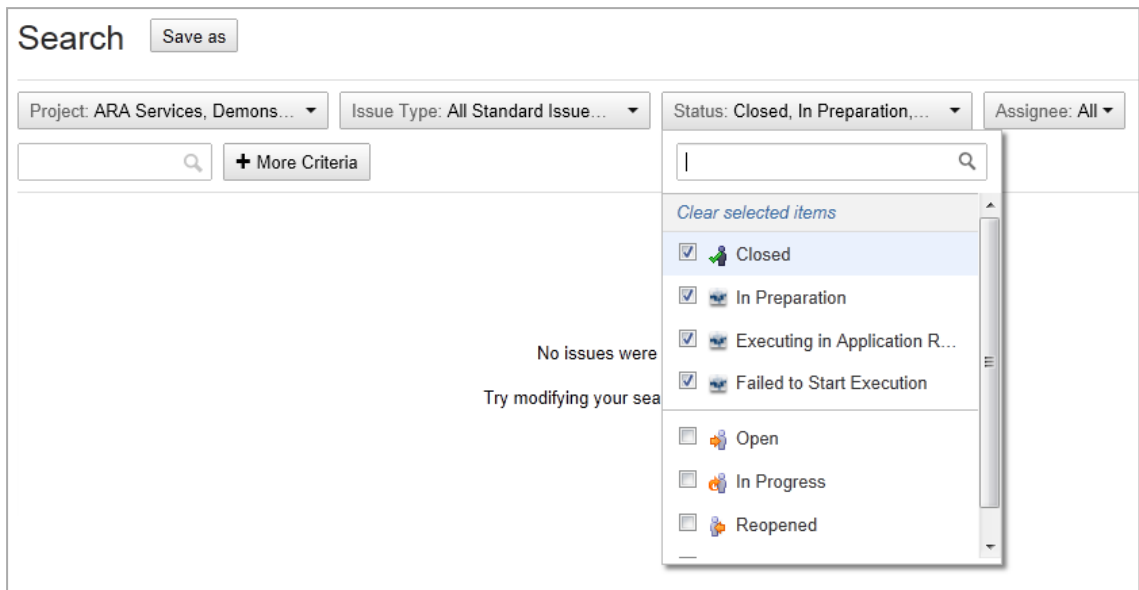
As a result, a filtered list is displayed:
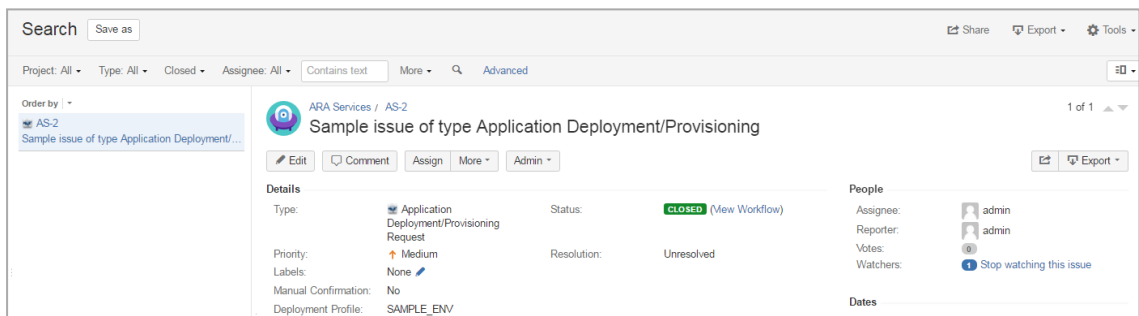
6 Troubleshooting

This section provides information about general troubleshooting steps.

Error	Possible solution
Comments are not visible after executing the ARA deployment issue.	• Check the permission for adding comments in JIRA. To do so: 1. Log in to JIRA as an Admin user via your web browser. 2. Select **Projects** under **Administration**. 3. Click on one project, for example "ARA Services". 4. On the left-hand side, click **Permissions**. A new page is displayed. 5. Go to the **Comment Permissions** section. 6. Verify the permission for adding comments. Usually it should be specified as Application Role (Any logged in user).
Plugin logs only Warning and Error messages.	• To troubleshoot a specific issue, you may need to change the logging level to "INFO", which can be done as follows: 1. Log in to JIRA as an Admin user via your web browser. 2. Choose **System**. 3. Navigate to **Troubleshooting and Support** > **Logging & Profiling** to open the **Logging** page, which lists all defined log4j categories (as package names) and their current logging levels. 4. Find the **Default** category and click the **INFO** link.
I can't find the log file.	Look for the `atlassian-jira.log` file on the machine where the JIRA instance is running.

7 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.

7.1 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.

Download Center

The Automic Download Center (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/) 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) 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.

Technical Support

Our Technical Support Team (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

7.2 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) and become an Automic Insider and be among the first to get news about new products and events, even before they are generally announced!

7.3 Download Center

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

The Automic Download Center (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.

7.4 Marketplace

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

The Automic Marketplace (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.

7.5 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) 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.

7.6 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/