

Usage Overview

1. User Interface

RADRunner can be used from any device that has a web browser, even a suitable mobile phone. A typical screenshot is shown below (click on it to view a full size version and explanation):

2. Screens

There are only a few different web pages in RADRunner. Apart from a simple [administration page](#), there are the following screens:

Login

Login as a [user](#) of the system

Register New User

Add a new user to the system

User

Display [Roles](#) assigned to current user

Start New Role

Assign new Role to current user

Role

Display available [activities](#) in current Role

Activity

Display non-automated [tasks](#) in current activity

Task

Prompt for input to current task

Role snapshot

Display the present state of the current Role in [Playwright XML form](#)

Resources snapshot

Display the present state of the current Role's resources in [standard XML form](#)

Some of these pages cause a change to the system simply by being displayed, even if no input from the user is made. In particular:

- The first time the login page is loaded, the system will initialise (unless it has been manually started from the [administration page](#))

- If the current Role is automated, loading the Role page causes an [automation cycle](#) to execute for that Role
- The snapshot pages each place a file containing the generated XML in the [system in directory](#), from where it can be viewed and/or edited via the LAN and/or HTTP.

3. Users

A user of the system is identified by their *email* - which must be unique - and *password*.

Each user has a *name*, but this does not have to be unique.

A user may be a *machine*, in which case its Role(s) are operated by RADRunner rather than by a human user.

A user may be *offline*, in which case it is known to the current system but its Role(s) are operated by a different system. The other system may be another RADRunner installation, a different process management system, or manual procedures.

3.1. User Page

The User Page in RADRunner displays the Role instances currently assigned to the logged in user. They are displayed in batches, and the user can navigate *up*, *down* or *to the top* at any time.

The batch size is controlled by the [system property](#) `com.rolemodellers.rim.roleBatchSize`, for which the default value is 8.

4. Roles

A *Role* captures the notion of a related set of goals and responsibilities. It includes:

- Data, known as [resources](#)
- [Activities](#) which operate on that data

4.1. Role Page

The Role Page in RADRunner displays the activities that are currently available. They are displayed in batches, and the user can navigate *up*, *down* or *to the top* at any time.

The batch size is controlled by the [system property](#) `com.rolemodellers.rim.actionBatchSize`, for which the default value is 8.

4.2. Role Automation

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A Role may be *automated*. The effect of this setting depends on the *parent* Role - the one which started the Role in question. If the parent contains a task *Do Automated Role Instances*, then every time this task is carried out, RADRunner will carry out all automatable tasks within the child, without prompting for user input.

The root Role in the system is 42, an instance of the [42 Role type](#). This Role type contains a *Do Automated Role Instances* task, and by default, so do all new Role types. Moreover, in both cases the task is contained in an activity with no precondition, i.e., one that can execute at any time. Hence the default behaviour of the system is for automation to be enabled in all automated Role instances. However, this can be changed at any time by removing the task from a particular parent, which would prevent automation in all children however deeply nested, or by placing a precondition on the task in a particular parent, which would enable it only under specific conditions.

If a parent is itself automated, and contains an available *Do Automated Role Instances* task, then the children will be automated whenever:

- A user logs in to the parent Role and visits the Role page
- The [background automation cycle](#) kicks in and reaches the parent Role

5. Resources

The resources in a Role are structured in tree form:

- The leaves are known as *attributes* - each one contains either a String, an Integer, a Float, a Boolean or a Date. There is a special Date type *Now* which always evaluates to the current time.
- The branches are known as *entities* - these contain a list of sub-entities and/or a list of attributes

A Role may not contain entity attributes directly, only entities.

See the task [Get Resource From Collection](#) for a discussion of collections inside a Role's resources.

Resources can be [imported from and exported to standard XML](#).

6. Activities

A Role does not contain work items directly - it contains *activities*, each of which may contain several [tasks](#). An activity executes under transactional control. If any of the tasks within it fails, all of the tasks will fail and no changes will be saved.

6.1. Activity Page

The Activity Page in RADRunner displays the user-interactive tasks in the current activity. They are displayed in batches, and the user can navigate *up*, *down* or *to the top* at any time.

The batch size is controlled by the [system property](#) `com.rolemodellers.rim.actionStepBatchSize`, for which the default value is 8.

7. Tasks

There are 2 types of tasks: [process definition](#) and [process enactment](#).

However, it is quite possible for a single Role to include tasks of both types. This is what makes it possible for a RADRunner system to [evolve from within](#), to cater for special cases and meet changing organisational practices.