From Road-mapping to Planning to JIRA and Sprints

Renata McCoy, PhD
Project Engineer
Tutorials

• Roadmaps and Quarterly Plans
• JIRA Agile – Navigation Explained
• Working with Sprints
• Editing Issues
Roadmaps and Quarterly Plans
ACME Roadmaps and Quarterly Plans Definitions

- **Roadmaps** are revolving plans, rebased on regular basis
  - 1-Year is adjusted every 6 months, 3-Year - every 1 year, and 10-Year - every 3 years
- **(Quarterly) Plans** are static plans based on 12-month revolving Roadmaps
- There are **All-ACME Roadmaps** and **Per-Group Roadmaps**
- **Per-Group Roadmaps** should come from **All-ACME Roadmaps**
- Where to find integrated All-ACME Roadmaps?
  - Council Confluence space
  - Navigate to ACME Roadmap
ACME integrated Roadmaps

The 10-Year Goal

Over the next 10 years, the ACME project will assert and maintain an international scientific leadership position in the development of Earth system and climate models at the leading edge of scientific knowledge and computational capabilities. With its collaborators, it will demonstrate its leadership by using these models to achieve the goal of designing, executing, and analyzing climate and Earth system simulations that address the most critical scientific questions for the nation and DOE.

ACME will achieve this goal through four intersecting project elements:

1. a series of prediction and simulation experiments addressing scientific questions and mission needs;
2. a well documented and tested, continuously advancing, evolving, and improving system of model codes that comprise the ACME Earth system model;

Figure 1. ACME Project Roadmap, the relationships among the first three major project elements: the simulations, the modeling system to perform those simulations, and the infrastructure to support the simulations.
# 10-Year ACME Roadmap

**Created by Renata McCoy, last modified just a moment ago**

## The 10-Year Goal

Over the next 10 years, the ACME project will assert and maintain an international scientific leadership position in the development of Earth system and climate models at the leading edge of scientific knowledge and computational capabilities. With its collaborators, it will demonstrate its leadership by using these models to achieve the goal of designing, executing, and analyzing climate and Earth system simulations that address the most critical scientific questions for the nation and DOE.

ACME will achieve this goal through four interacting project elements:

1. a series of prediction and simulation experiments addressing scientific questions and mission needs;
2. a well-documented and tested, continuously advancing, evolving, and improving system of model codes that comprise the ACME Earth system model;
3. the ability to use effectively leading (and "bleeding") edge computational facilities soon after their deployment at DOE national laboratories; and
4. an infrastructure to support code development, hypothesis testing, simulation execution, and analysis of results.

![Diagram showing relationships among simulation, development, and architecture roadmaps](figure)

*Figure 1. ACME Project Roadmap, the relationships among the first three major project elements: the simulations, the modeling system to perform those simulations, and the machines on which they will be executed. Unlike other three elements that have distinct but overlapping phases, the fourth element, the infrastructure, will evolve continuously based on the requirements imposed by project needs.*

<table>
<thead>
<tr>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>2016</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
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</thead>
<tbody>
<tr>
<td>Y1Q4</td>
<td>Y2Q1 / Q5</td>
<td>Y2Q2 / Q6</td>
<td>Y2Q3 / Q7</td>
<td>Y2Q8</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 0.25 deg

- **ACME v1.0-alpha**
- **SE Integration**
- **ACME v1.0-beta**
- **ACM**

**Features Testing Runs**

**Some Coupling Testing**

**V1.0-alpha Coupling Testing**

**V1.0-beta Tuning**
Per-Group 12-month Roadmaps

• Per-Group Roadmaps live in each Group’s Space

• Should stem from All-ACME same time-frame Roadmap
  – 12-month Group Roadmap comes from 1-year All-ACME Roadmap

• 12-month Roadmap lists big capabilities and large tasks (of the order of a quarter time)

• We developed table format for these tasks so we can integrate all roadmaps across the project
## Group’s 12-month Roadmap Table

**Effort required to meet these objectives (time-ordered tasks for each major capability); Jan 2015 - Dec 2015 (Q3-Q6 or Y1Q3-Y2Q2)**

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>ID</th>
<th>Primary and related task IDs</th>
<th>Effort Lead</th>
<th>Depends on</th>
<th>Start date (planned)</th>
<th>End date (planned)</th>
<th>Current status</th>
<th>Notes</th>
<th>ACME version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update Convection Parameterization</td>
<td>A1</td>
<td>P1</td>
<td>Shaoceng Xie</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epic 1: Text updated CLUDD + MG2</td>
<td>Correctly implemented code in ACME</td>
<td>A1.1</td>
<td>Wuyin Lin (code implementation, CAPT, AMIP)</td>
<td>Kai Zhang (SCM)</td>
<td>01 Mar 2015</td>
<td>31 Dec 2015</td>
<td>started</td>
<td>Coordinated with RRM A3.4 and Higher resolution simulations A4.</td>
<td>v0.2</td>
</tr>
<tr>
<td>Epic 2: Test UNICON</td>
<td>Correctly implemented code in ACME</td>
<td>A1.2</td>
<td>Jin-Ho Yoon (code implementation, AMIP)</td>
<td>Wuyin Lin (CAPT)</td>
<td>01 Mar 2015</td>
<td>31 Dec 2015</td>
<td>started</td>
<td>Coordinated with RRM A3.4 and Higher resolution simulations A4.</td>
<td>v0.2</td>
</tr>
<tr>
<td>Epic 3: Test G. Zhang’s improvements to ZM</td>
<td>Correctly implemented code in ACME</td>
<td>A1.3</td>
<td>Steve Han (code porting)</td>
<td>Wuyin Lin (code porting, CAPT, AMIP)</td>
<td>01 Jan 2015</td>
<td>31 Dec 2015</td>
<td>started</td>
<td>Coordinated with RRM A3.4 and Higher resolution simulations A4.</td>
<td>v0.2</td>
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**Big Task (= Epic in JIRA)**

**Large Capability (often = JIRA Component)**
Group’s Quarterly Plans

• Quarterly Plan is a refined version of 12-month Roadmap for a quarter effort
• Quarterly Plans are static and next quarter plans are prepared 6 weeks after the start of the current quarter
• Quarterly Plans are not to be rebased or adjusted after creation
• We can add or change tasks in quarterly plan, but this is reflected as a scope creep and an explicit change in plan
• To create quarterly plan,
  – copy and paste the 12-month roadmap table to a new quarterly plan page,
  – delete the tasks that do not fall into this quarter
  – refine all tasks to smaller granularity of 2-weeks efforts
  – create JIRA tasks from all the tasks in the table
Creating Group’s Quarterly Plans
Copy 12–month roadmap table

12-Month Roadmap - Atmosphere Group

Plan for Atmosphere Group for the 12-month period of Jan 2015 - Dec 2015 (Q3-Q6 or Y1Q3-Y2Q2).

Select the rows you want to copy; it does not matter what columns you select, then click on copy rows icon.
Creating Group’s Quarterly Plans
Paste rows into quarterly plan table

Position cursor in the first column, first row of the quarterly plan table and click paste icon
Paste rows icon

Edit new Quarterly Plan
Creating JIRA tasks from quarterly pages with one command
Creating JIRA tasks from quarterly pages with one command

<table>
<thead>
<tr>
<th>Capability related tasks (table ID for dependencies)</th>
<th>Deliverable ID</th>
<th>Primary and related task IDs</th>
<th>Effort Lead</th>
<th>Depends on</th>
<th>Start Date (planned)</th>
<th>End Date (planned)</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test updated CLUDD + MG2</td>
<td></td>
<td></td>
<td>Wuyin Lin</td>
<td>06 Apr 2015</td>
<td>17 Apr 2015</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Wuyin Lin</td>
<td>01 Apr 2015</td>
<td>30 Jun 2</td>
<td></td>
</tr>
</tbody>
</table>

Create Issue Pop-up

Click Edit to change the Issue Type or Group

Click inside the field to choose component

Click on this text to create all the issues in the table
Creating JIRA tasks from quarterly pages with one command

<table>
<thead>
<tr>
<th>Epic 1: Test updated CLUBB + MG2</th>
<th>Correctly implemented code in ACME</th>
<th>A1.1</th>
<th>@Wuyin Lin</th>
<th>01 Apr 2015</th>
<th>30 Jun 2015</th>
</tr>
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<tbody>
<tr>
<td>Update Convection Parameterization</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Create Issue Pop-Up after selecting creation of all issues

Move up/down to scroll inside the window

Click on this text to create only one issue

Create a single issue from the highlighted text.
Creating JIRA tasks from quarterly pages with one command

- All issues are created based on the first column
- The issue title/summary will be exactly as in the text in first column
- All issues will have the metadata that you provided while creating issues, i.e. same component and same due date, they will all be of the same type ‘task’ is that’s what you chose
- You can use batch conversion to change metadata to the correct one
Working in JIRA Agile, Navigation
Switching between Confluence and JIRA Navigation

Image of a Confluence page showing a navigation menu with options for Confluence, JIRA, and Bamboo. The page also displays a table titled "Y1Q4 Atmosphere Tasks Plan" with columns for Capabilities, Deliverable, ID, Primary and related task IDs, Effort Lead, Depends on, Start date (planned), End date (planned), and Current status.
To find your agile board click on Agile then choose your board from Recent Boards or choose Manage Boards, show all and find your board.
JIRA and Agile Boards
Navigation Explanation

- Navigation between JIRA and Confluence
- JIRA Views Navigation
- Planning View: Backlog, Active sprints, Releases, Reports, Components, Issues, Test Sessions, Timesheets, Add-ons
- Sprint View: Ocnice Sprint Y1Q4-6
- Navigation to open EPICS Tab and VERSIONS Tab
- Navigation to a different Scrum Board

ACME
Accelerated Climate Modeling for Energy
U.S. DEPARTMENT OF ENERGY
JIRA Agile Development
Backlog (Planning) View

Navigation to Different Views:
- Backlog
- Versions Tab
- Epic Tab
- Issues and Sprints View

Filters:
- Ocean
- Land-ice
- Sea-ice
- Only My Issues
- Recently Updated

 Versions
- Create version

 EPICS
- All issues
- Design of MPAS-O vertical re-gridding algorithm
- ACME-v0.0
- Completed: 1
- Unestimated: 0
- Create issue in epic
- Linked pages

Issues without versions
- MPAS-O: CORE-II on Eddy Closure meshes
- MPAS-O: CORE-II on enhanced Southern

Backlog
- 91 issues
- Create Sprint

- OG-40 ISOMIP: add to repo and support
- LI-O coupling: standard
- MPAS-O: BGC design issues
- OG-63 MPAS-O: Create staged implementation/test plan
- OG-169 move Glint downscaling to coupler
- LI: enable coupling...
JIRA Agile Development
Active Sprint (Working) View

Scrum Board - Sprint View

To Do

- MPAS-O: CORE-II on Eddy Closure meshes 1 issue
  - MPAS-O: CORE-II on Eddy Closure...

- LI-O coupling: boundary layer physics 3 issues
  - LI-O coupling: boundary layer physics

In Progress

- OG-294
  - Verify MPAS-O surface heat flux budget
  - MPAS-O: CORE-II on Eddy Closure...

- OG-33
  - ISOMIP: preliminary testing

Done

- OG-34
  - Ocean: Land-ice forcing design document

LI-O coupling: boundary layer physics
JIRA Agile Development
JIRA Components View

Components View Lists All your JIRA Project Components

Use It to Add New Components
JIRA Admin can do that
JIRA Agile - Working with Sprints
Creating a New Sprint

To create a new sprint, click on the "Create Sprint" button in the Backlog section.
JIRA – Working with Sprints

Changing Sprints Name

- Backlog
  - Sprints
    - OsnIce Sprint Y1Q4-9

Changing sprint's name

Sprint section
JIRA – Working with Sprints
Completing (Closing) a Sprint

Active sprints: TC-S-1

0 days remaining Complete Sprint

Closing Sprint

Complete Sprint

1 issue was Done.
6 incomplete issues will be returned to the top of the backlog.

Sub-tasks are not included in the total(s) above, and are always included in the same sprint as their parent issue.

Complete Cancel
JIRA – Working with Sprints
Starting a New Sprint And Moving It

Topmost Sprint Section
Moving sprint up or down
Menu to move sprint up/down or to delete it
JIRA – Working with Sprints
Assigning Epics, Moving Issue to a Sprint

To assign an issue to an epic, drag and drop the issue on top of the epic.
JIRA Agile – Editing Issues
JIRA Agile - Changing metadata

Keyboard Shortcuts

Hit ‘?’ on the keyboard to see Keyboard Shortcuts

### Issue Actions
- Edit Issue: `e`
- Assign Issue: `a`
- Comment on Issue: `m`
- Share Issue: `s`
- Edit Issue Labels: `l`
- Jump to fields for editing: `j`
- Log work on issue: `w`
- Assign To Me: `i`

### Agile Shortcuts
- Backlog: `1`
- Active sprints / Kanban board: `2`
- Reports: `3`
- Presentation mode: `z`
- Next Column: `n`
- Previous Column: `p`
- Hide/Show Detail View: `v`
- Log work on issue: `w`
- Toggle all smilies: `:`
- Send to Top: `s` then `t`
- Send to Bottom: `t` then `b`

Keyboard Shortcuts are enabled. Disable Keyboard Shortcuts
JIRA Agile - Changing metadata
Detailed View of a Task

Click on an issue to see detailed view on the right
JIRA Agile - Changing metadata
Add/Change Assignee – ‘a’ or ‘i’

With an issue selected, hit ‘a’ on the keyboard to add/change assignee or hit ‘i’ to assign it to yourself without any additional pop-up.

Start typing a name (no @ sign) and the suggestions will show up below.

Shortcut tip: Pressing ‘a’ also opens this dialog box.
With an issue selected, Hit ‘e’ on the keyboard to see an edit pop-up window.

Click to see possible values.

Scroll for more options.

Click inside a field to add text.
Select an issue then click the link in the detailed view
JIRA Agile - Changing metadata
Editing a Task – full issue edit view

Full edit view of an issue
Editable fields, click on the text to change it, see possible values
Click to see more options
Editable
Add comments
Log work time
More options
JIRA Agile - Changing metadata
Changing Task into Epic #1

With task selected, hit ‘e’ to get edit pop-up window.

Click triangle to see possible choices.

Click on Epic to change task to an epic.

Click to Update.
JIRA Agile - Changing metadata
Changing Task into Epic #2

In full edit view, hit ‘e’ for edit pop-up window add the epic name.
If you cannot see the ‘Epic Name’ field extend the ‘Configure Fields’ and choose it from the menu.
Click on ‘Update’ when done.
JIRA Agile – Changing metadata
Bulk Editing #1

From the Issues View - click on ‘View all issues and filters’

This is an issues view with the filter from our board

Click on Tools

Choose all

bulk change: all 25 issues

Clear Sorts

Columns +
JIRA Agile – Changing metadata
Bulk Editing #3

**Choose Issues**
- Selected 4 issues from 1 project(s)

**Choose Operation**
- Operation Details
- Confirmation

**Step 3 of 4: Operation Details**
Choose the bulk action(s) you wish to perform on the selected 4 issue(s):
- Change Issue(s) you wish to perform on the selected 4 issue(s):
  - Bug
  - Change Priority
  - Major
  - Add to existing

- Change Assignee
- Change Reporter
- Renata McCoy
- Change Component(s)
- Change Component(s)
  - Add to existing
  - Component 2

- Change Due Date
- Change Comment

Choose bulk changes multiple options at once

Check different options

Add component
**JIRA Agile – Changing metadata**

**Bulk Editing #4**

### Step 4 of 4: Confirmation

**Updated Fields**

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Field Action</th>
<th>Field Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component's</td>
<td>Add to existing</td>
<td>Component2</td>
</tr>
</tbody>
</table>

**Email notifications will be sent for this update.**

**The above table summarizes the changes you are about to make to the following 4 issues. Do you wish to continue?**

<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
<th>Assignee</th>
<th>P</th>
<th>Status</th>
<th>Updated</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>TESTCLAS-49</td>
<td>Test cases for case studies</td>
<td>Unassigned</td>
<td>↑</td>
<td>OPEN</td>
<td>03/May/15</td>
<td>30/Apr/15</td>
</tr>
<tr>
<td>TESTCLAS-53</td>
<td>Tier 1b: Asian watershed diagnostics</td>
<td>Unassigned</td>
<td>↑</td>
<td>OPEN</td>
<td>03/May/15</td>
<td>30/Apr/15</td>
</tr>
<tr>
<td>TESTCLAS-30</td>
<td>Higher Vertical Resolution</td>
<td>Unassigned</td>
<td>↑</td>
<td>OPEN</td>
<td>03/May/15</td>
<td>30/Apr/15</td>
</tr>
<tr>
<td>TESTCLAS-24</td>
<td>Epic 2: Implement and evaluate pressure gradient treatments</td>
<td>Renata McCoy</td>
<td>↑</td>
<td>OPEN</td>
<td>03/May/15</td>
<td>30/Apr/15</td>
</tr>
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**Additional Field**

<table>
<thead>
<tr>
<th>Components</th>
<th>Description</th>
<th>Flagged</th>
<th>Labels</th>
<th>Links</th>
<th>Sub-Tasks</th>
<th>Reporting Quarter</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component1</td>
<td>None</td>
<td>None</td>
<td>Y1Q3</td>
<td>Unnext</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**You could have disabled sending notification**

**added component**

**confirm your edits**