Jenkins UI Gets a Makeover

Stepping stones towards a new Jenkins UI

Jeremy Hartley & Félix Queiruga

What we'll talk about today

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Agenda

- State of Jenkins Today
- Existing UI & Blue Ocean
- UI Overhaul Philosophy
- Progress Update
- Case Studies
- Future Direction

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State of Jenkins Today

Where are we at today?

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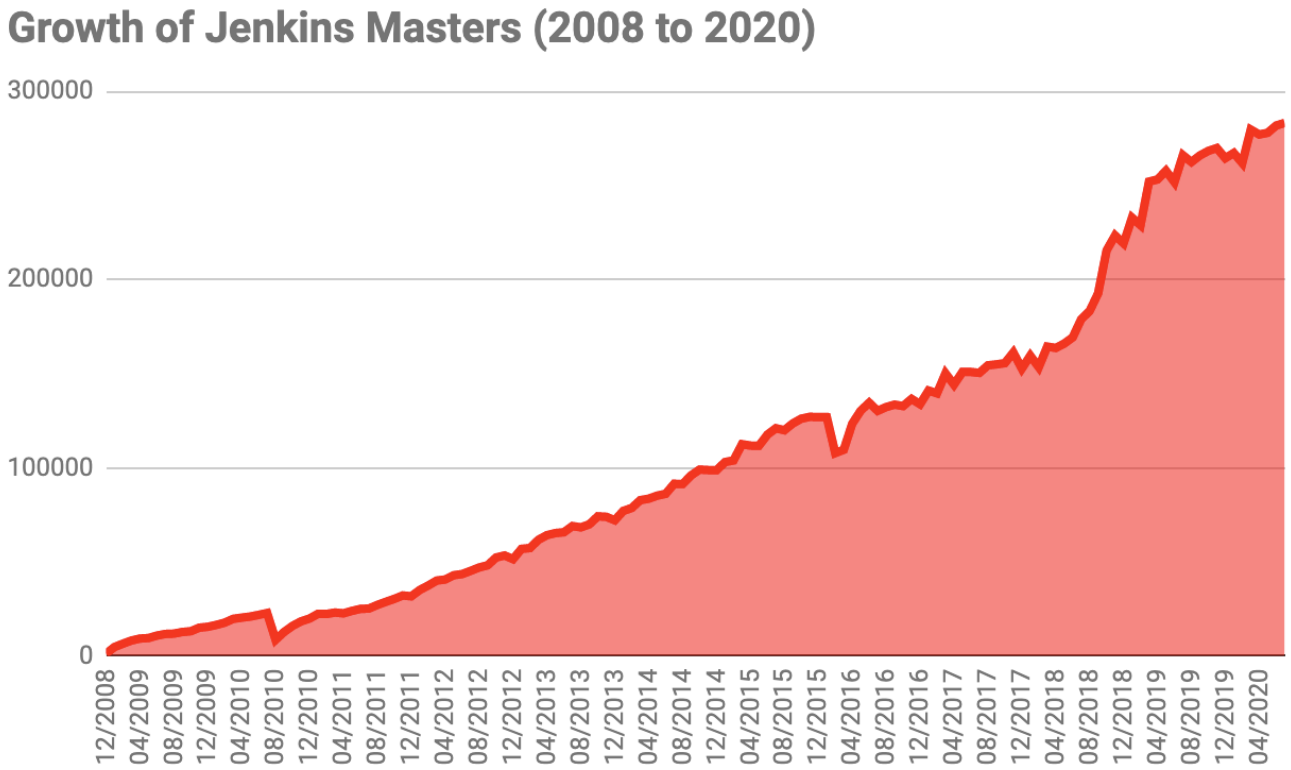
Jenkins has come a long way

- Started in 2004
- 283,113 Jenkins Masters online in July 2020



https://stats.jenkins.io/

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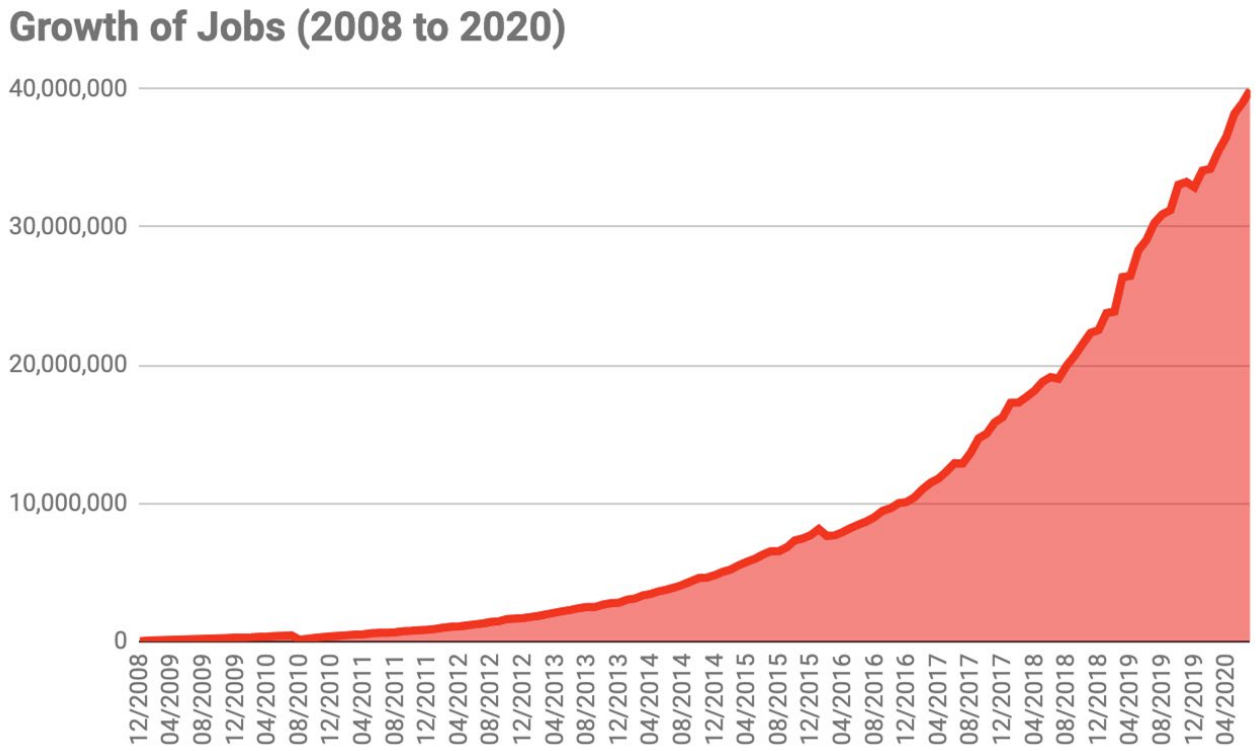
Exponential Growth of Jobs

- 40 million jobs in July 2020
- Almost 33% year over year growth in number of jobs.



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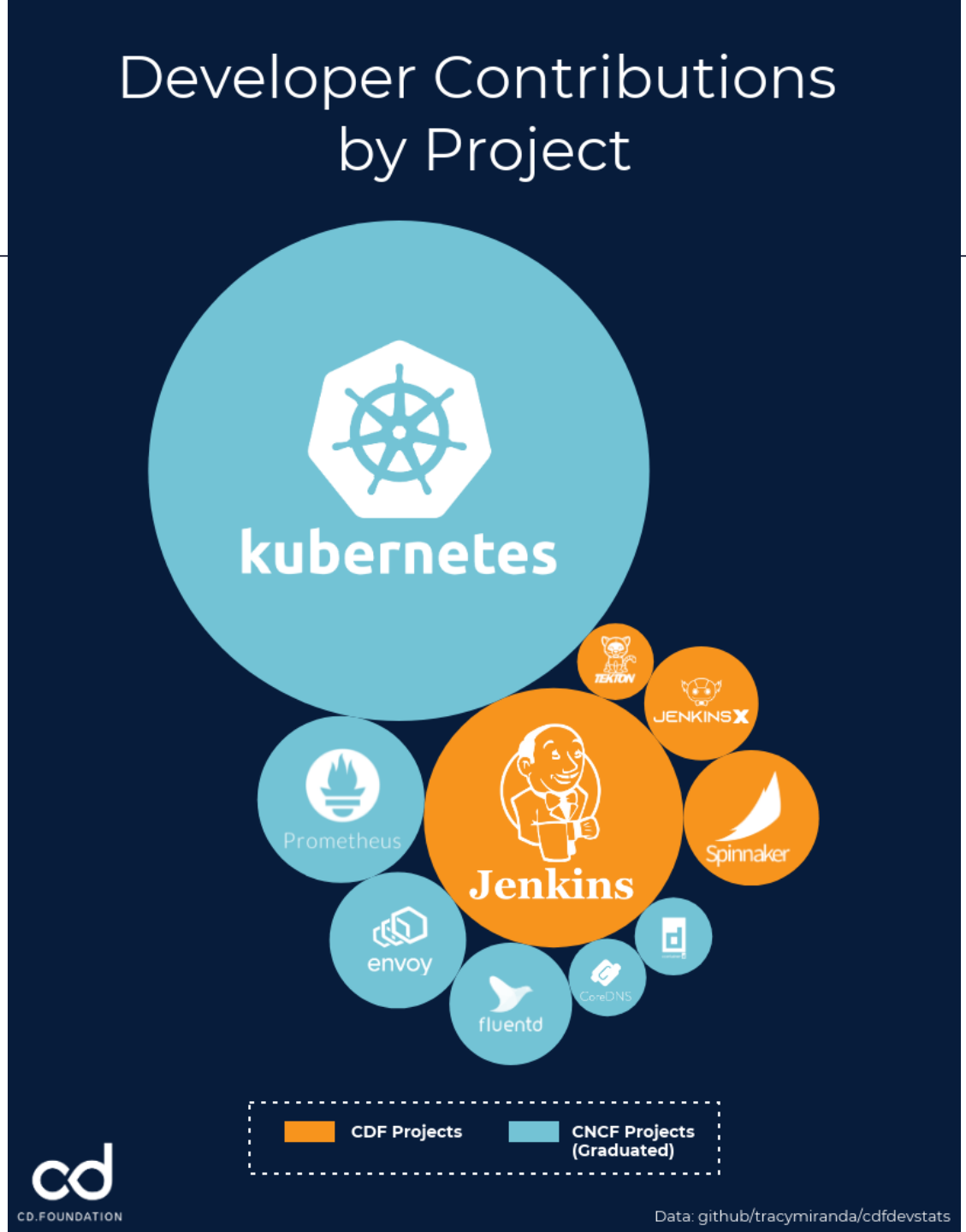
Developer Contributions by Project



State of the UI

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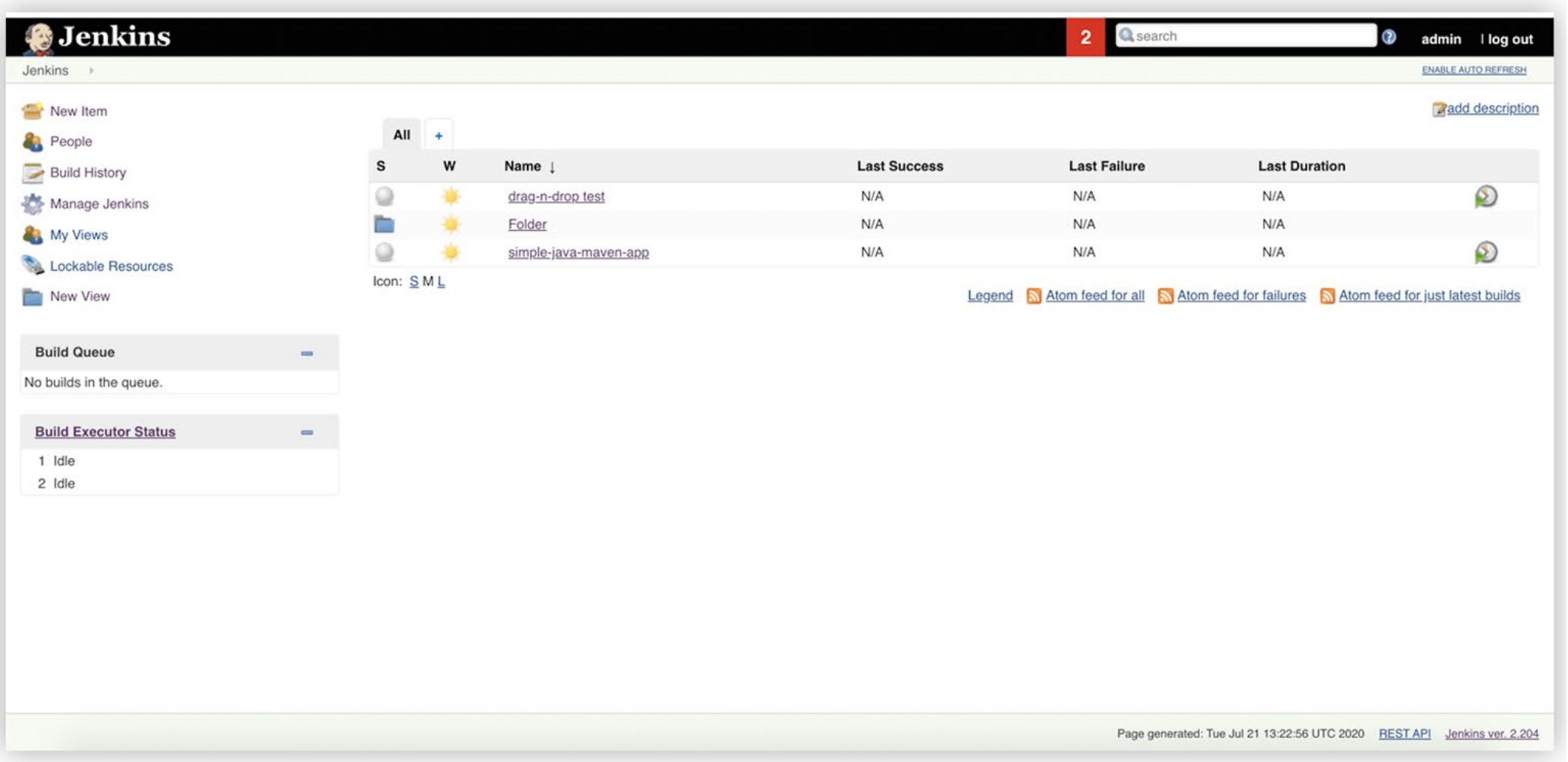
The Jenkins UI lags behind



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Blue Ocean

- Originally planned as new Jenkins UI
- Plugin integration was a key challenge

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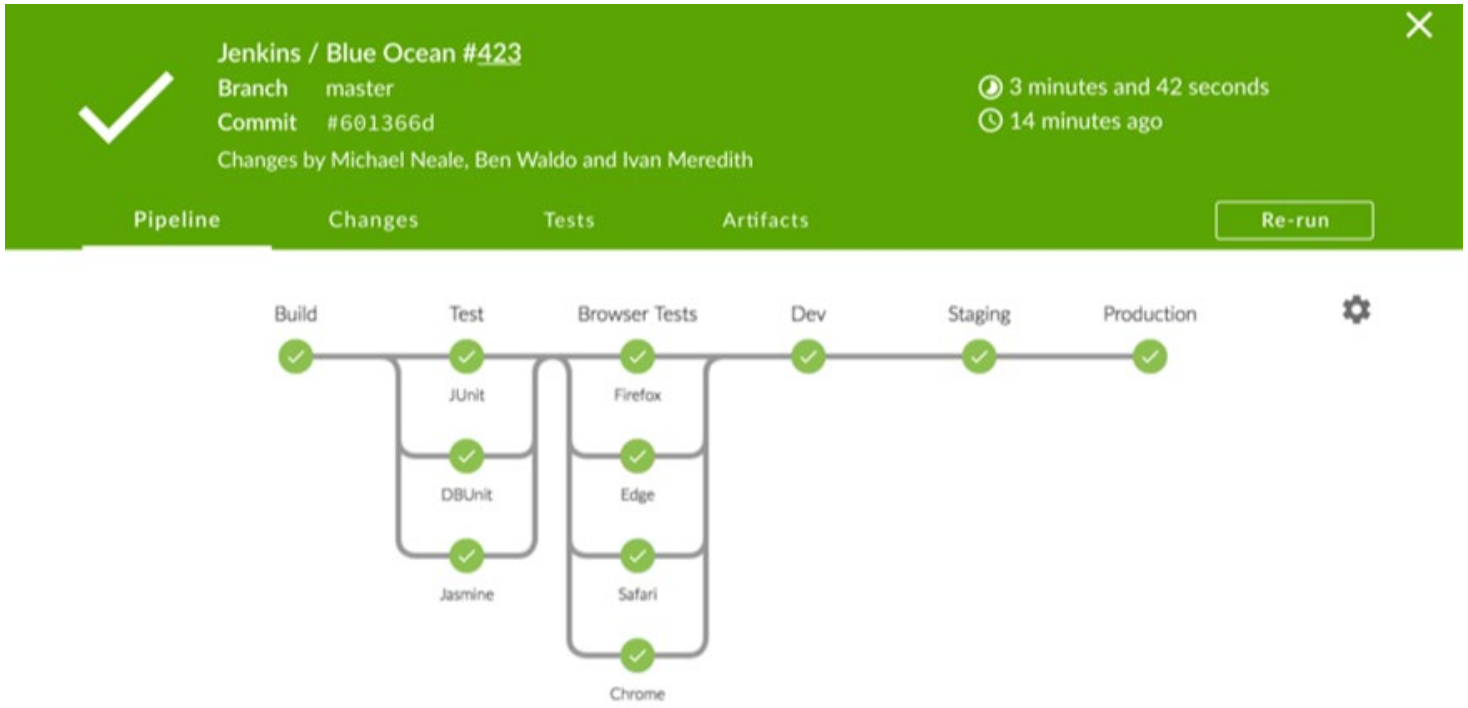
Status of Blue Ocean

- The scope of Blue Ocean is now pipelines
- Major development has now stopped
- Critical defects and security issues continue to be addressed



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UI Overhaul Philosophy

Vision, Key Learnings and Planning

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Finding a way forward

- Need to break the UI deadlock
- Learn from past mistakes
- Make it easier for community to contribute to UI

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A gradualist approach

- No appetite for boiling the ocean
- Community involvement before writing code
- Deliver results iteratively in weekly and LTS releases

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Jenkins UX SIG

- Created User Experience SIG
  - First meeting late last year
- About 10 regular members
  - Meet every 2nd Wednesday
- Open to everybody - Come join us!
  - https://www.jenkins.io/sigs/ux/

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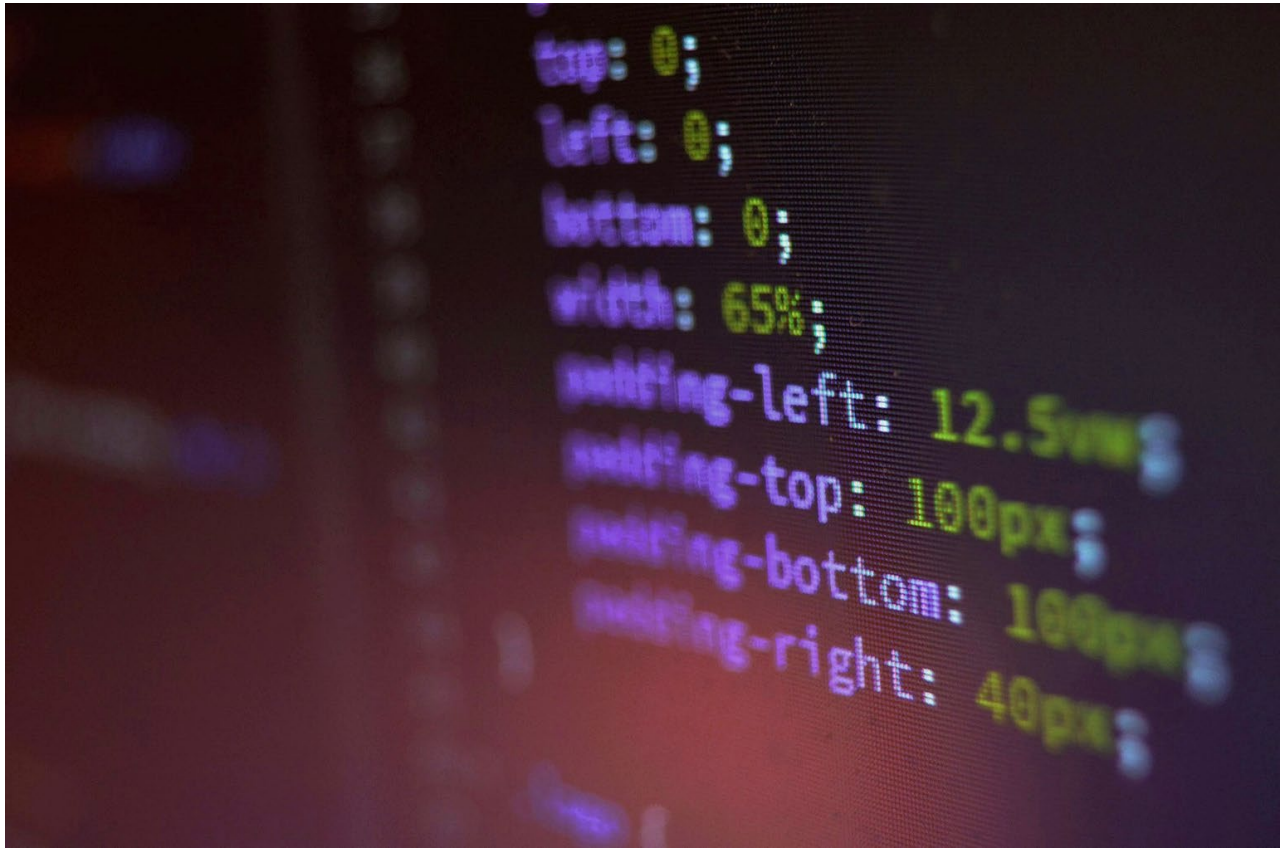
CSS-inspired Overhaul

- The UI overhaul initially largely CSS-based
- UX/behavior largely left alone in favor of modernizing UI
- Opportunistic refactoring



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Progress Update

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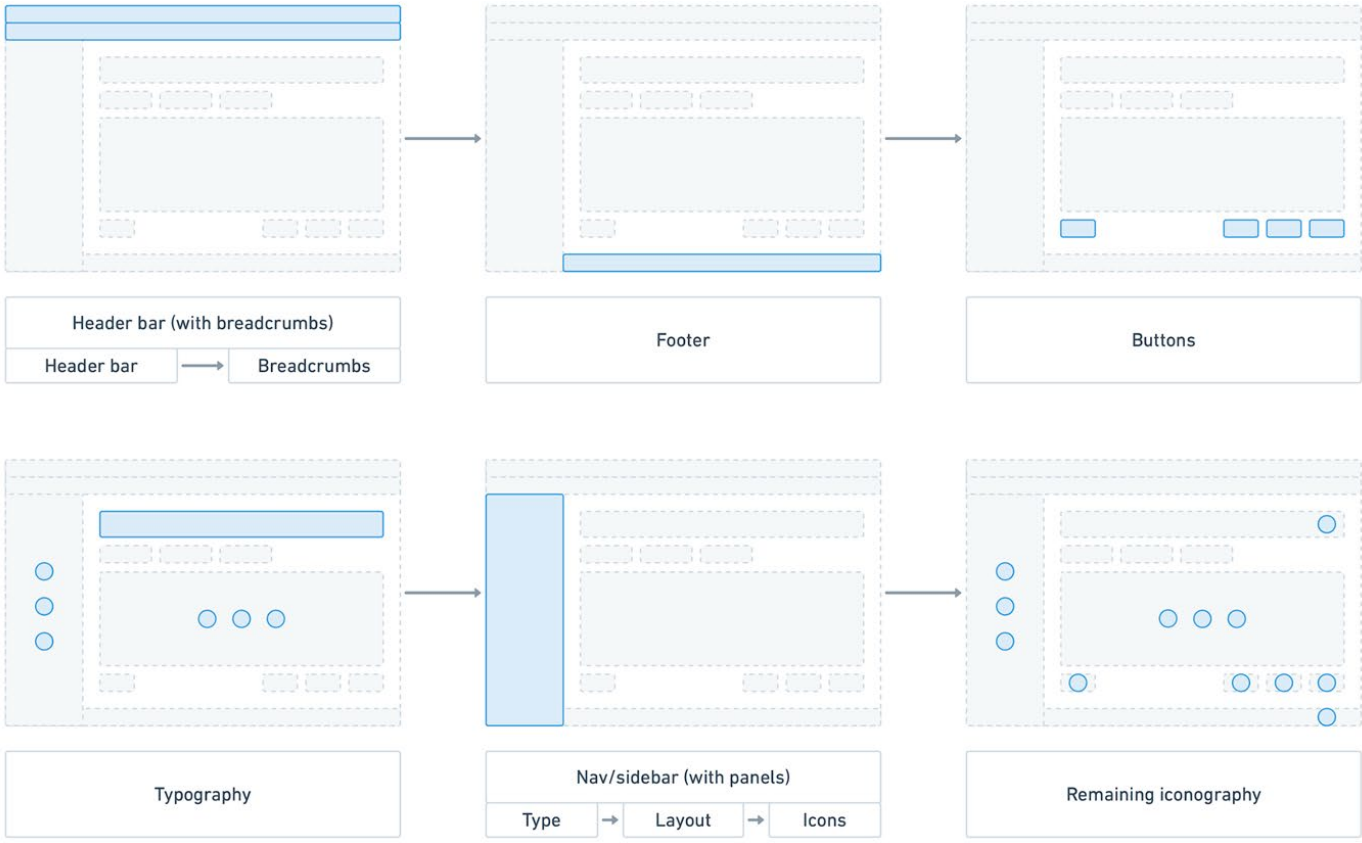
Delivered Work

- New Header Design and Breadcrumbs
- Updated Page Footer
- Updated Buttons & Hyperlinks
- Improved Typography
- Updated Sidebar & Panels
- Tabs & Tables



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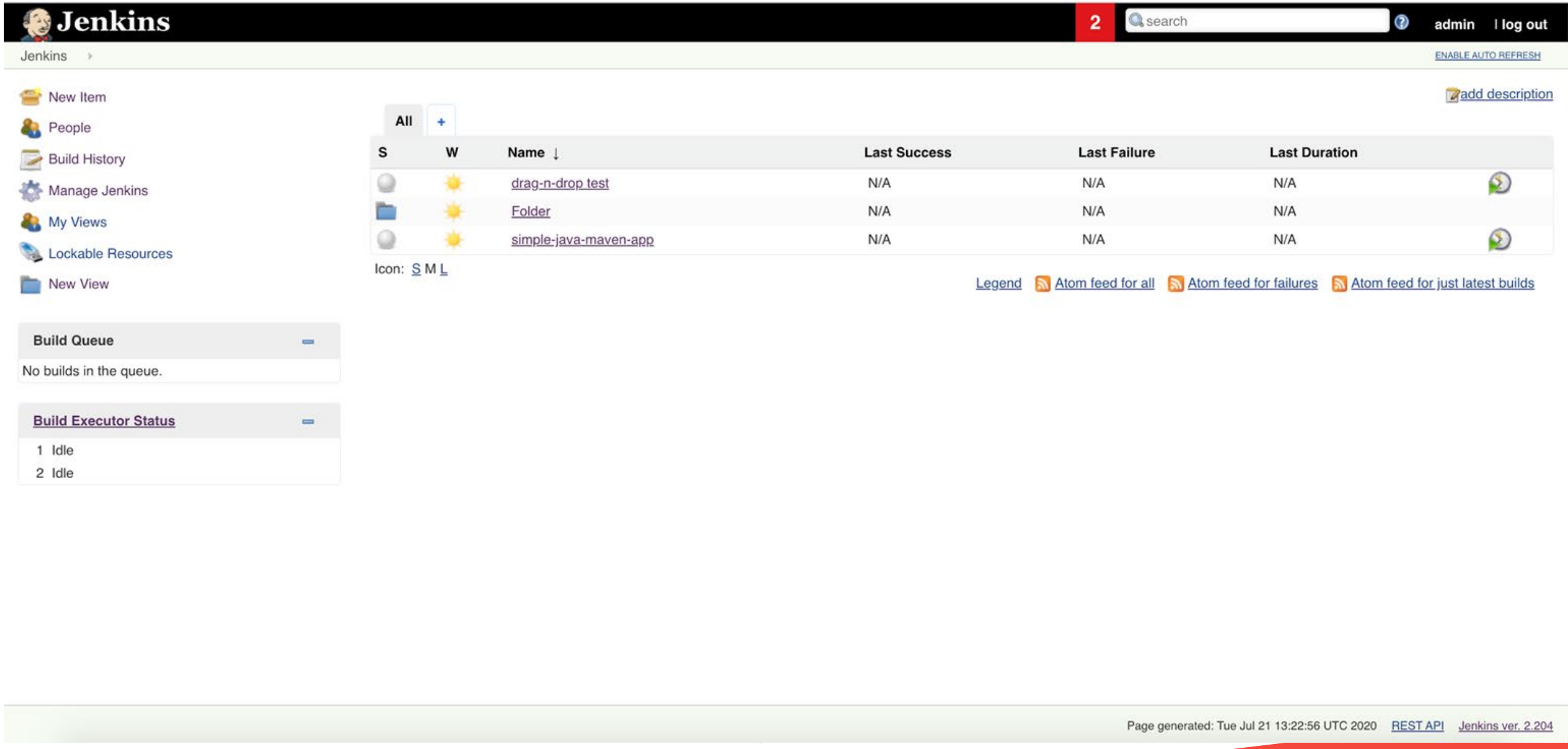
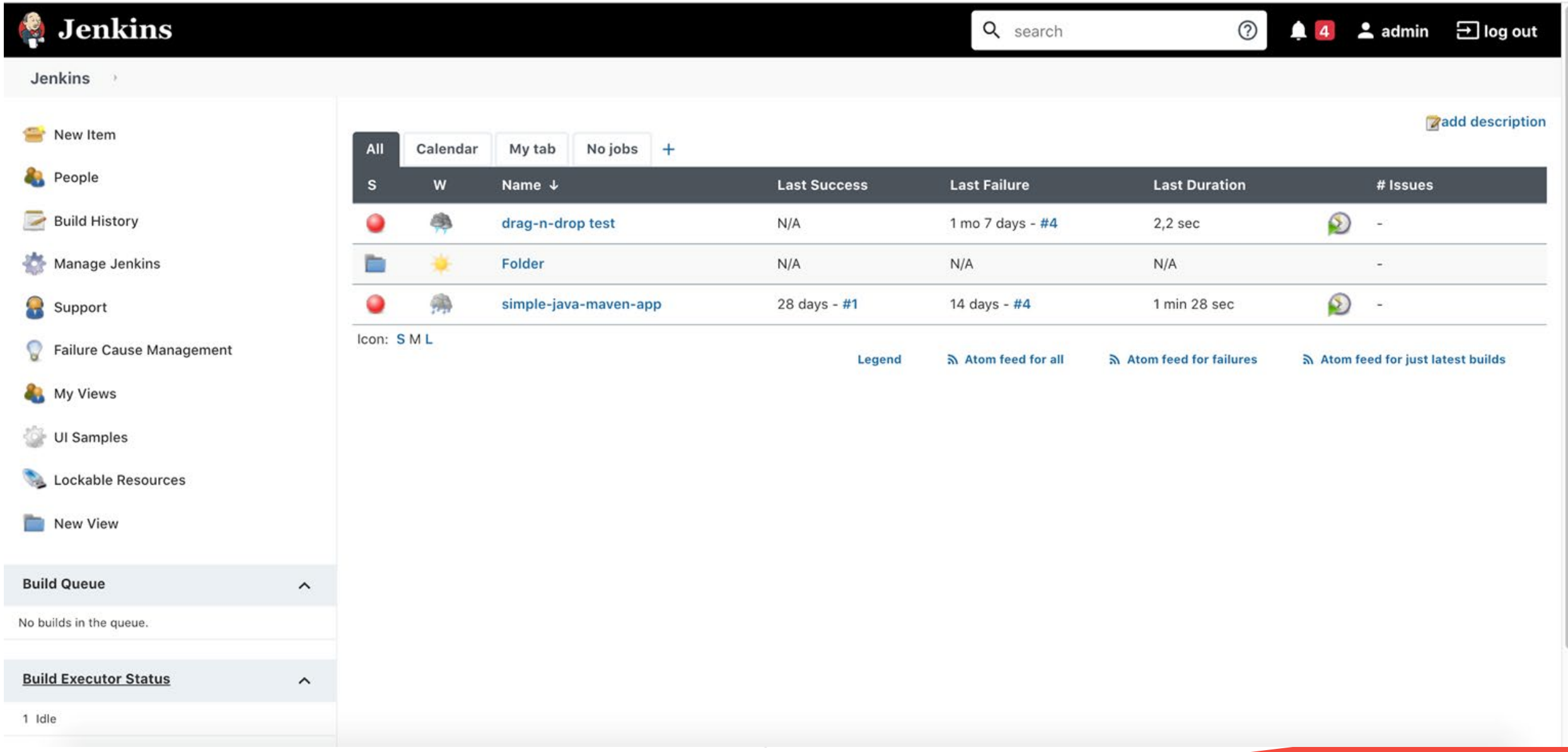
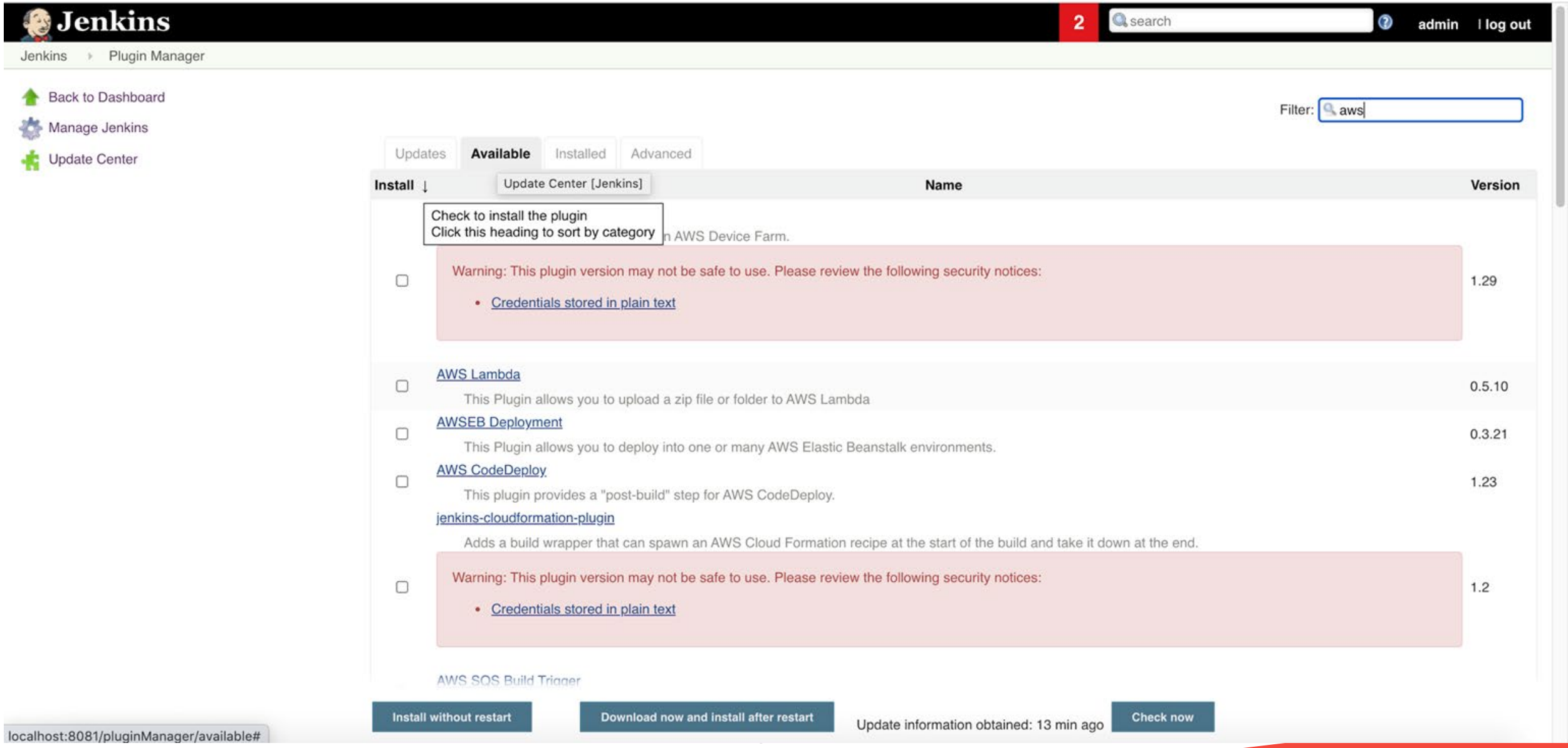
Home Page Before



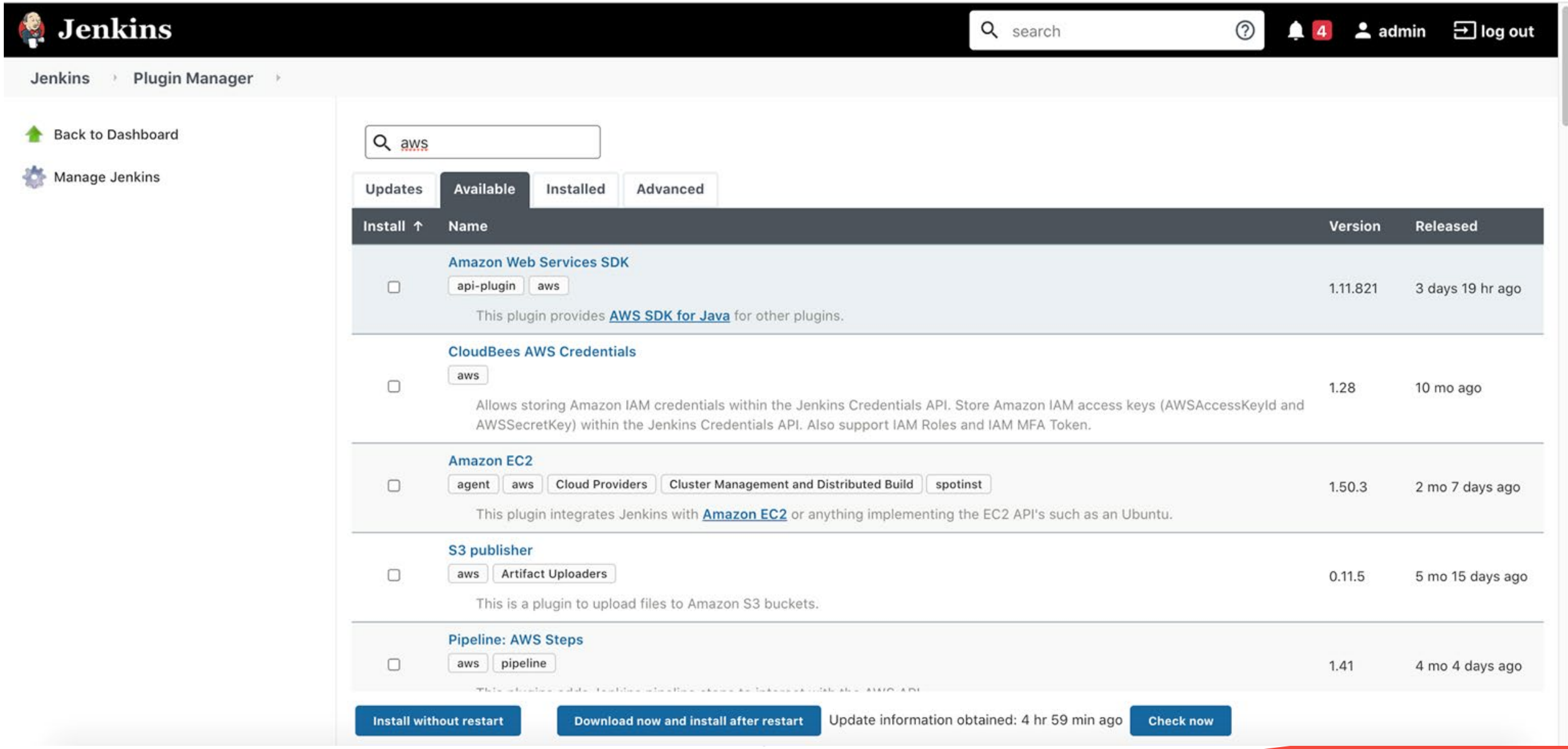
Home Page After



Plugin Management Before

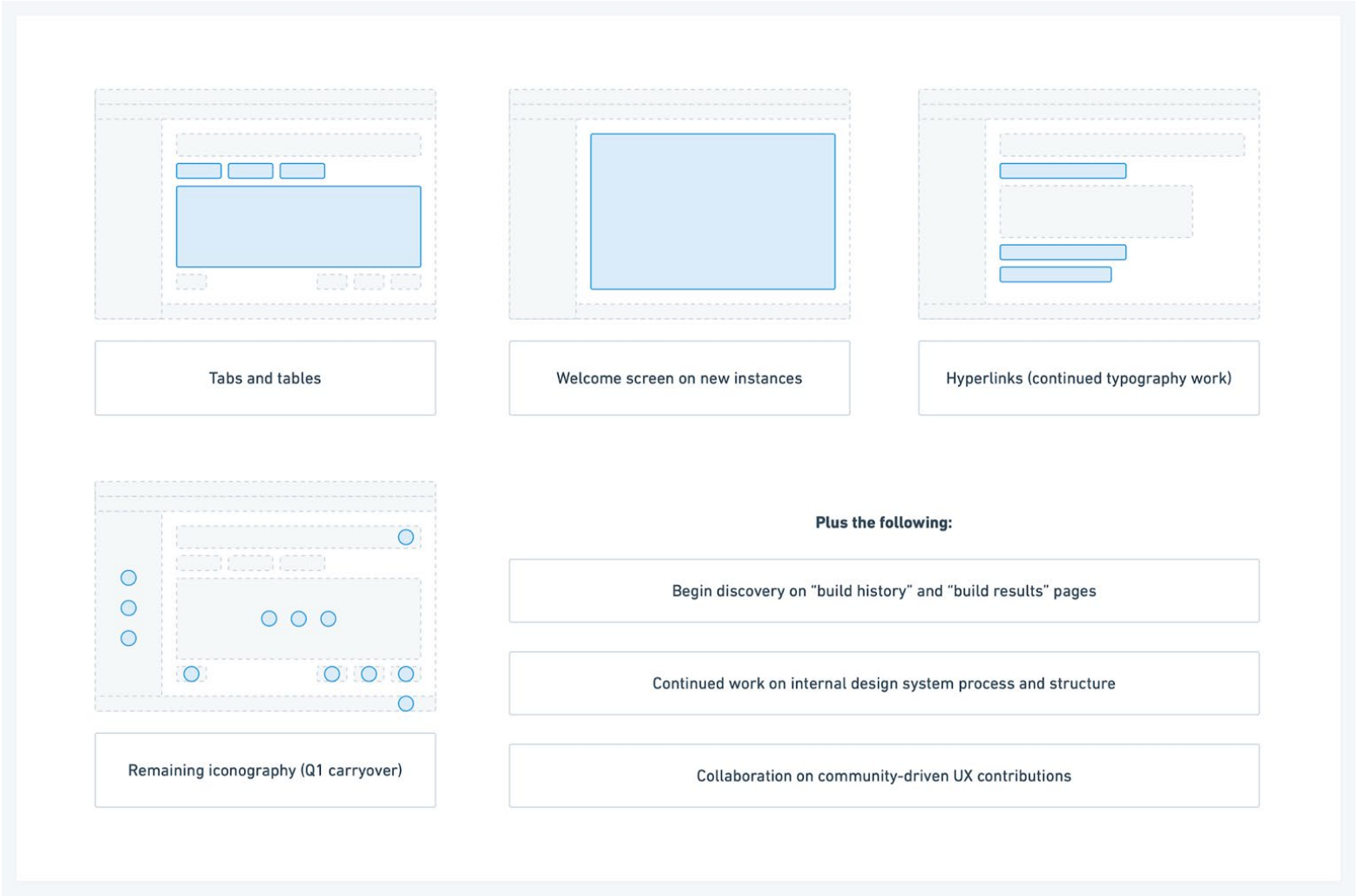


Plugin Management After



Planned Work

- Iconography Overhaul
- Welcome Screen on New Instances



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Case Study - One

Revamp Strategy

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Revamp Strategy

Challenges

- Work around legacy styles and libraries
  - prototypejs
  - Yahoo! UI
  - Etc
- Avoid breaking plugins
- Where do we start?

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Revamp Strategy

Solution

- Broad changes that affect as many screens as possible
- Carefully choosing the order of changes
- Iterate until "good enough" & merge often

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Case Study - Two

Themes in Jenkins

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Themes in Jenkins

- Current way of theming: Simple Theme Plugin

- New theme support policy
  https://www.jenkins.io/doc/book/managing/ui - themes/#themes - support - policy

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Improved Themeability

- Added experimental support by theming using CSS Variables, by **@timja** (Tim Jacomb)
- All new styles use them

```
// State colors
--primary: #0b6aa2;
--primary-hover: #0587d4;
--primary-active: #095683;
// Link
--link-color: var(--primary);
--link-color--hover: var(--link-color);
--link-color--active: var(--text-color);
--link-text-decoration: none;
--link-text-decoration--hover: underline;
--link-text-decoration--active: underline;
--link-font-weight: 600;
```


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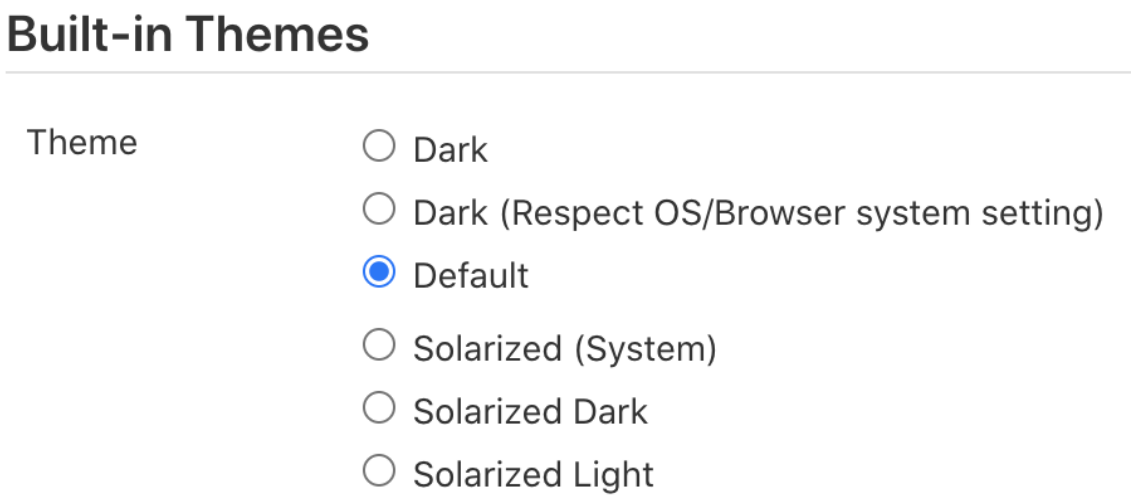
Improved Themeability

- New theme manager plugin
- Themes as plugins
- Several incubating themes available



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Theme Demo

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Moving Forward

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Future Focus Areas

- Deeper Page Reworks
  - Build Status Page
  - Build History Page
  - Credentials Management
  - Etc
- Pipeline Visualization
- Cleaner separation front-end and back-end
- Forms: Table to div transition

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Q & A

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Thank You

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