

UX Recommendations for Infinispan

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4.17

Key: The following feedback is organized by video/area.
The suggestions are categorized by:

General UI

PatternFly

Usability

And prioritized for user impact as:

High

Medium

Low

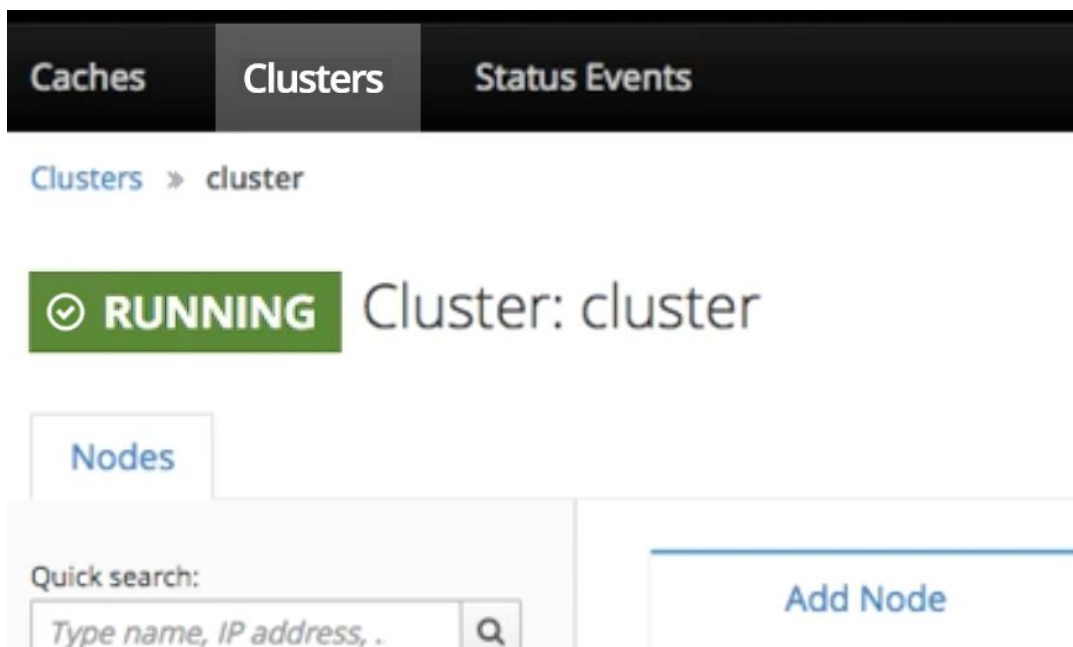
Scenario 1: Managing Server Cluster (add/remove cluster)

[View Video](#)

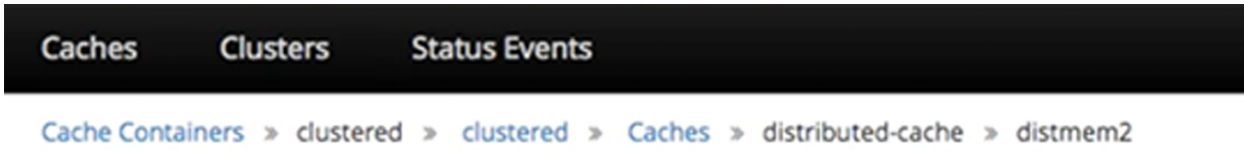
Suggestions

- A. Highlight the tab that has current focus as seen [here](#)
- B. Display icon with text, to communicate status.

PatternFly, Usability/High



- C. Upper left hand corner has competing and repeating context. Location is not clear. Addition example on Caches Tab: (no recommendations)



Create Cache

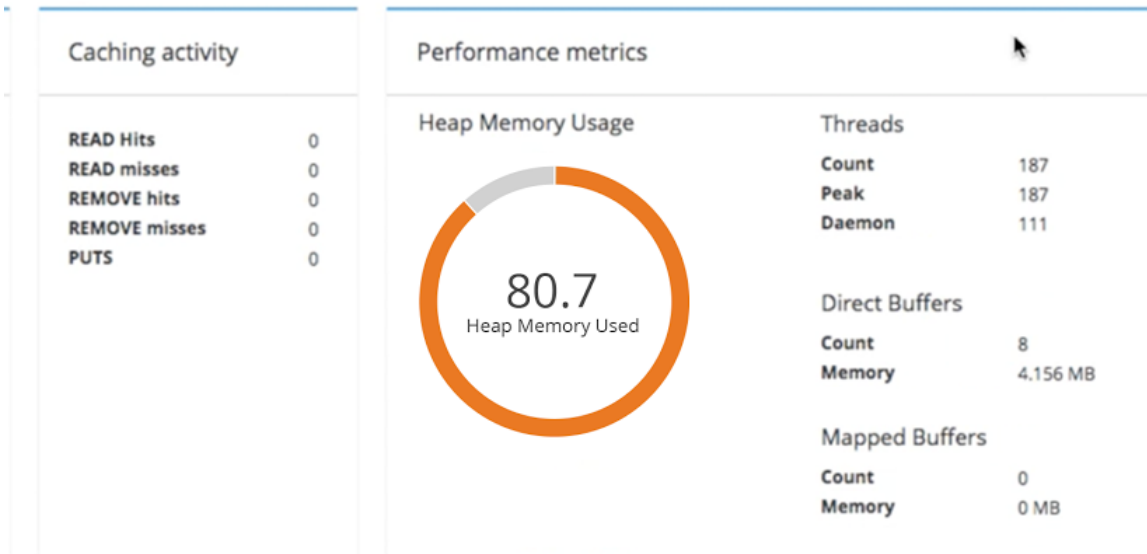
- D. Change graph to match PatternFly widget explained [here](#)
 Change unused portion of the memory to color : #D1D1D1
 Rely on the hover states of the widget for the unused percentage.
 Using PF widget will give you fonts, hover states and colors

General UI, PatternFly/Medium

Content alignment

- Increased height of the Performance metrics card
- Increased spacing between Threads, Direct Buffers and Mapped Buffers
- Left aligned the numbers in the right column

General UI/Low

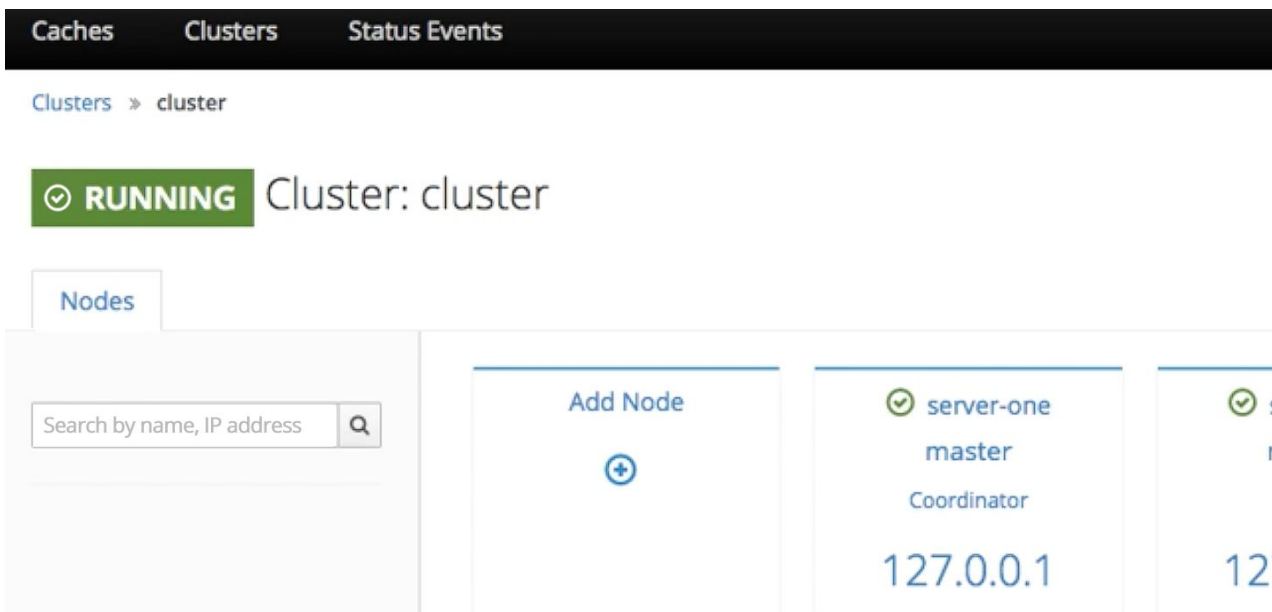


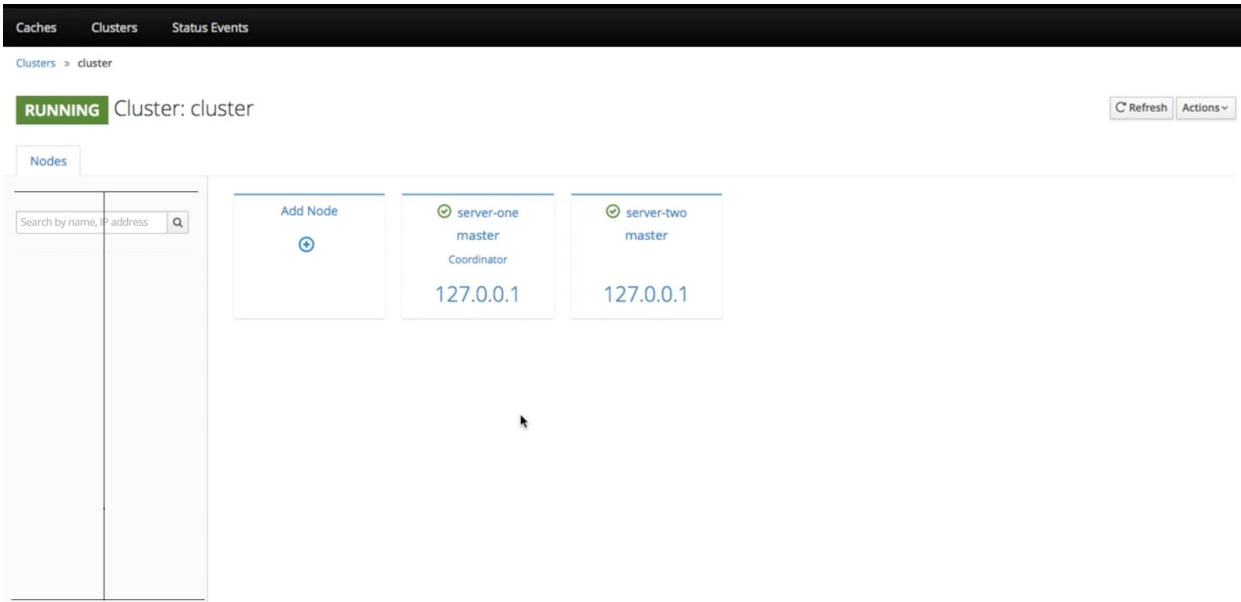
E. Suggestions for Search presentation + location

Usability/Medium

Idea A1:

1. Visually ground Search in the left pane, by making the entire area of the left pane gray.
2. Remove label and change field text to "Search by name, IP address"

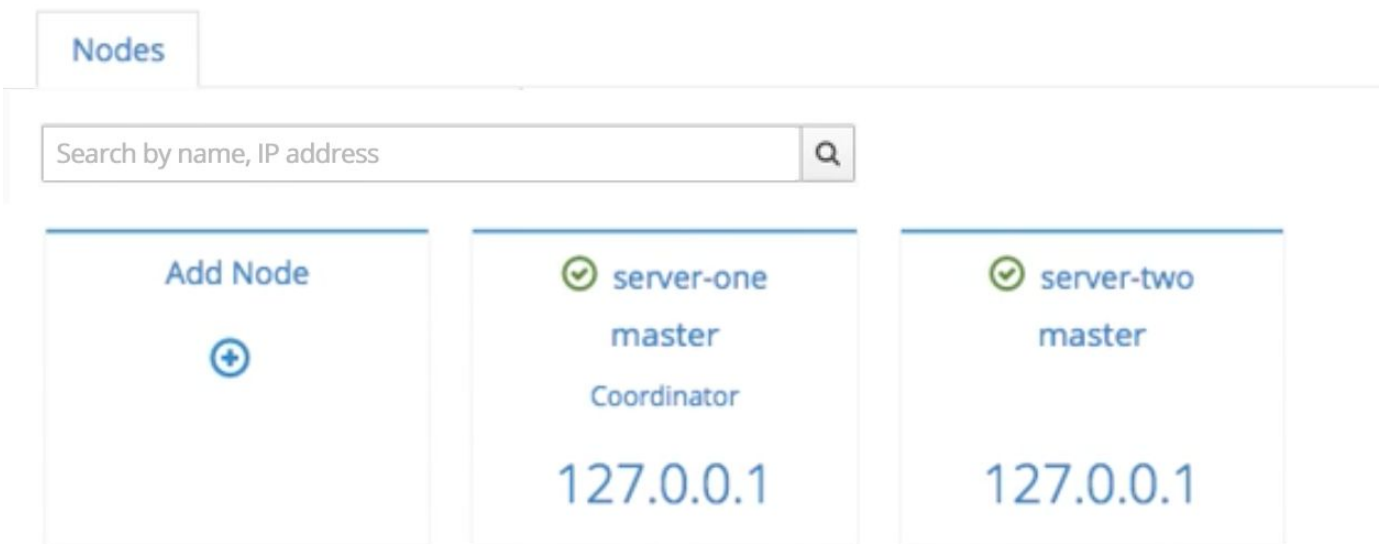




*note the gray area covers the entire left pane area....

Idea B1:

1. Move the Search to appear above the cards, and visually lighten the appearance.
2. Change field text to "Search by name, IP address + remove the label. Room to elongate the field.



Idea A2:

Clusters > cluster

RUNNING Cluster: cluster

Nodes

Name

Add Node

+

server-one
master
Coordinator
127.0.0.1

server-two
master
127.0.0.1

Side Filter: Empty State

Clusters > cluster

RUNNING Cluster: cluster

Nodes

Name

- IP Address
- Name**

Add Node

+

server-one
master
Coordinator
127.0.0.1

server-two
master
127.0.0.1

Side Filter: Choose Filter Type + Enter text criteria.

RUNNING Cluster: cluster

Nodes

Name ▾ Server_Two

0 Results

Active Filters:

Name: Server_Two x

[Clear All Filters](#)

There are

Suggestions

- Make
- Try dif

Side Filter: Return Results.

1. The search criteria "type" is determined first in the drop down. See full PatternFly Filter design [here](#).
2. Search criteria can then be entered into an adjoining field to continue filtering, by free form text entered.
3. Pro: Solution is extensible for filter type.
4. Pro: This better aligns with the concept of the left pane faceted searching that occurs, in conjunction with the filter, on other tabs, so leaving this here and focusing on the return results UI might be the best option.
5. Con: Solution is extensible, in that it can scroll the text entered, but without displaying the full text entered, for the user to visibly see, the user may not see a spelling error or misstep in the criteria entered and not think of why they are getting a no results returned message or inaccurate returns. To complete this UI, the criteria entered could be displayed in the return message of the right pane.

Idea A2: Return Results for Left Pane Filter

There are **0** results based on the filter criteria.

Suggestions

- Make sure all words are spelled correctly.
- Try different or more general keywords.

[Clear All Filters](#)

Message Text

The screenshot shows a web application interface with a dark header containing navigation links: Caches, Clusters, and Status Events. Below the header, the breadcrumb path is 'Clusters > cluster'. The main content area features a green 'RUNNING' status indicator and the text 'Cluster: cluster'. On the right side of this header, there are 'Refresh' and 'Actions' buttons. A 'Nodes' tab is active, showing a filter dropdown set to 'Server_Two'. Below the filter, it displays '0 Results' and 'Active Filters: Name: Server_Two'. A 'Clear All Filters' link is present. The main content area displays the message 'There are 0 results based on the filter criteria.' followed by a 'Suggestions' section with two bullet points: 'Make sure all words are spelled correctly.' and 'Try different or more general keywords.' A 'Clear All Filters' link is centered below the suggestions. A mouse cursor is visible near the bottom of the page.

Full Screen for center placement.

Idea B2:

The screenshot shows a navigation bar with 'Caches', 'Clusters', and 'Status Events'. Below it, a breadcrumb trail reads 'Clusters > cluster'. A green 'RUNNING' status indicator is followed by the text 'Cluster: cluster'. A 'Nodes' tab is active. A filter dropdown is set to 'Name' with the placeholder text 'Filter by name'. Three node cards are visible: an 'Add Node' button with a plus icon, and two existing nodes. Each existing node has a green checkmark, the name 'server-one master' or 'server-two master', the role 'Coordinator', and the IP address '127.0.0.1'.

Top Filter: Empty State.

This screenshot is identical to the one above, but the filter dropdown menu is open. The menu lists 'Name' (which is highlighted in blue), 'IP Address', and 'Name' (repeated). The rest of the interface, including the 'RUNNING' status and the two master nodes, remains the same.

Top Filter: Choose Filter Type + Enter text criteria.

Caches

Clusters

Status Events

Clusters > cluster

RUNNING

Cluster: cluster

Nodes

Name Server_Two

0 Results

Active Filters:

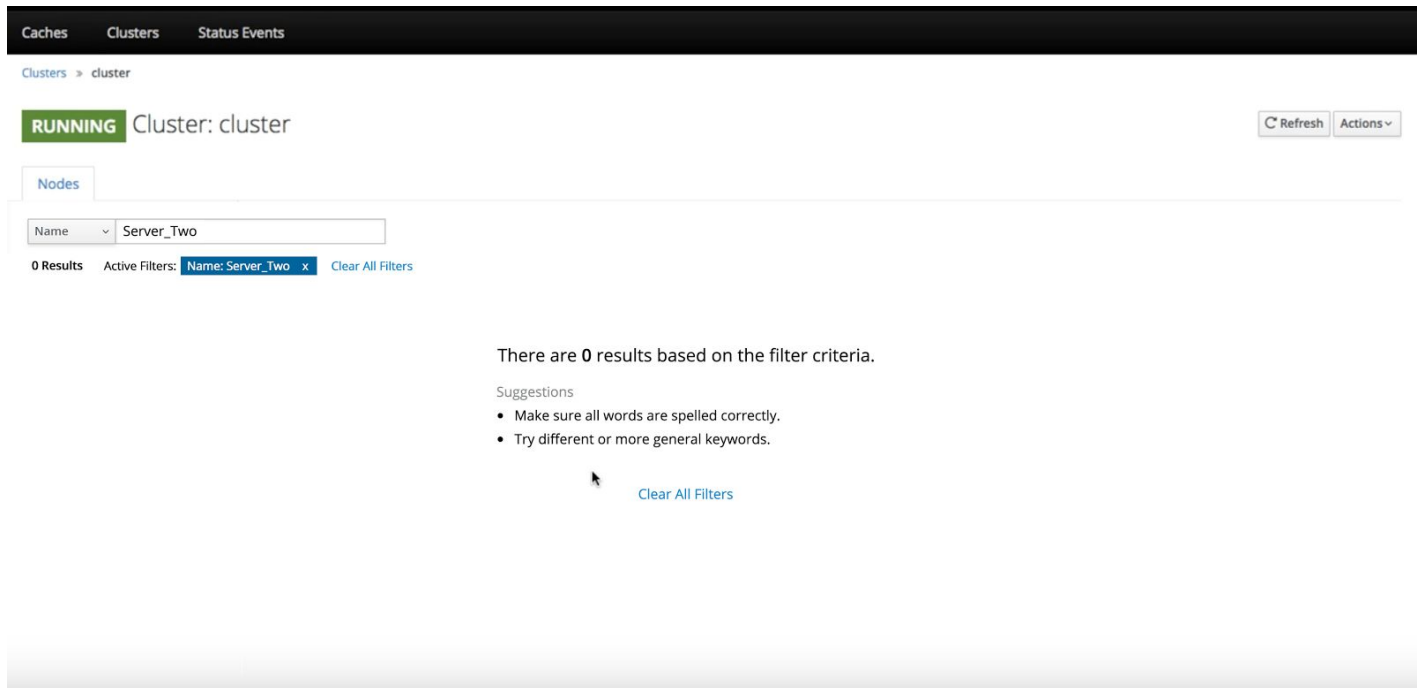
Name: Server_Two x

[Clear All Filters](#)

Top Filter: Return Results.

1. The search criteria "type" is determined first in the drop down
2. Search criteria can then be entered into an adjoining field to continue filtering, by free form text entered.
3. Pro: Solution is extensible for filter type and multiple filter queries.
4. Pro: Solution is extensible, in that there is more room to display longer text entries so that the user can most likely see the full criteria entered and the text area can still scroll the text entered.
5. Con: This UI does not align as well to the faceted search UI that displays, in conjunction with the filter, on other tabs.
6. The UI should still display the the full text entered, for the user to visibly see, the user may not see a spelling error or misstep in the criteria entered and not think of why they are getting a no results returned message or inaccurate returns. This could be rectified by displaying the filter criteria in the right pane.

Idea B2: Return Results for Top Pane Filter



F. Adjust card layout to align with PatternFly. See PatternFly standards [here](#).
General UI, PatternFly/High

Center text

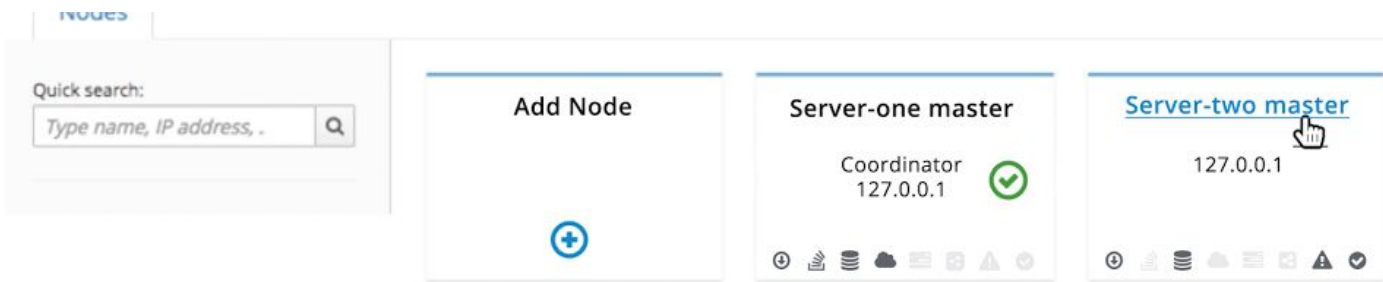
Bottom, center align status icon

Right side display additional icon

Underline and color highlight on mouse-over

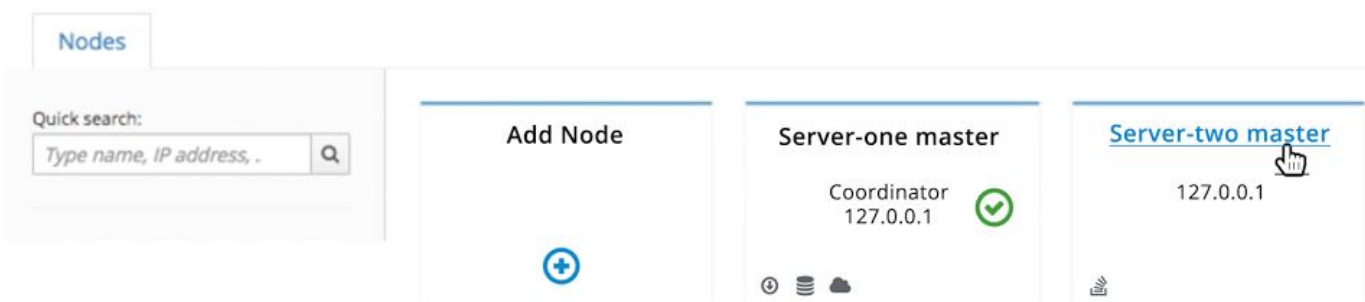
Icon Layout and Behaviors for consideration:

Card Icon Idea A: (recommended)



- All icons are displayed and only those that are active/used/in service are visually highlighted.
- Consistency in placement makes it easy to scan and compare, at a glance which card/server is using what icons. Otherwise the user has to do the work to see which "server" is using which "icon". And also informs as to what else might be possible. (if there is reason to not have the user see what might be possible, the behavior of presentation, would need to be modified to accommodate)

Card Icon Idea B:

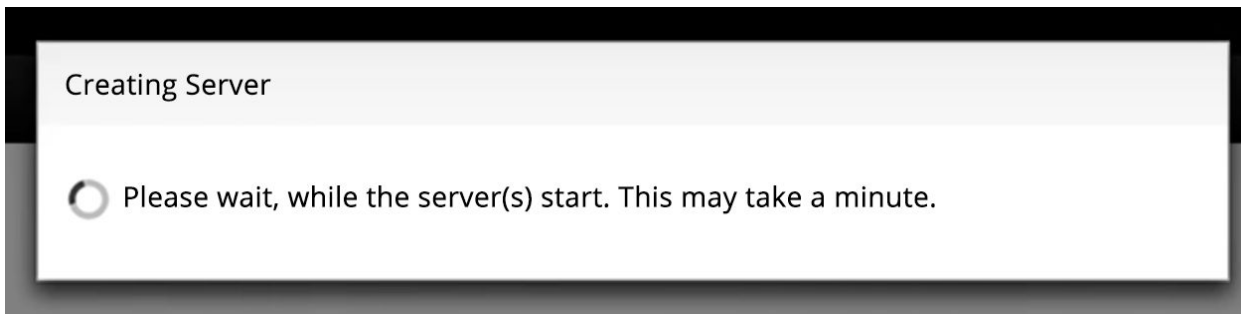


- If there are mainly only 4 of the icons ever used, they could be continuously reordered and not concern the UI with placement. 3-4 icons are easier to scan.
- However, once you get over 4 icons, comparing and understanding at a glance, which server is using which "icons", puts a good deal of cognitive

work on the user. It becomes much more difficult to parse, and absorb this information.

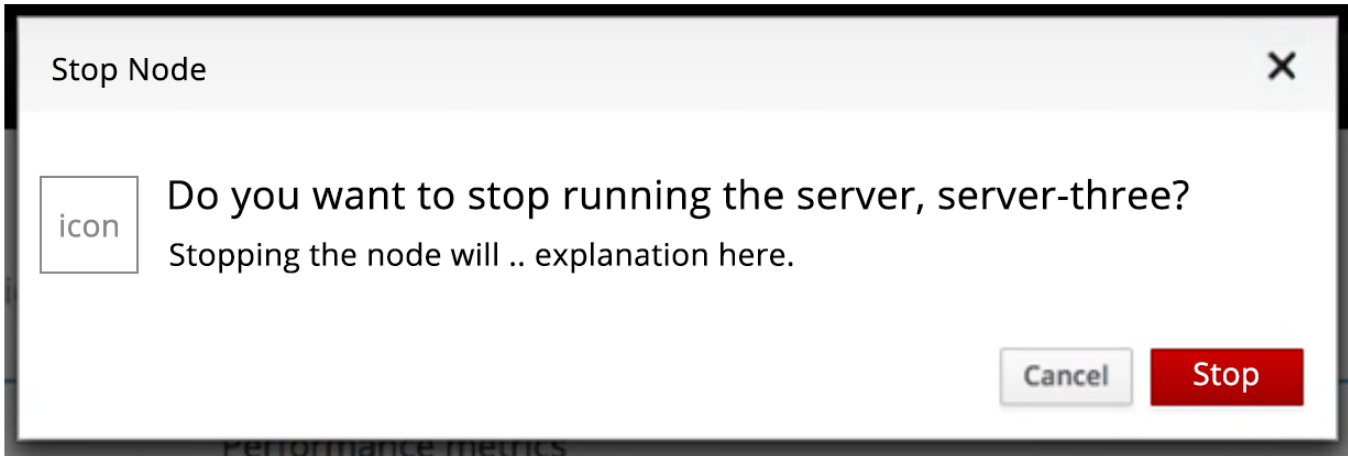
G. Create Server Modal Dialog:
PatternFly, Usability/High

Changed Title to reflect the action that invoked it
Moved spinner and text adjusted to reflect PatternFly standards, as [specified here](#)



H. Stop Node Modal Dialog:
General UI, Usability/High

Changed Title to reflect the action that invoked it
Consider rephrasing text as a question, for conversational dialog.
Provide a brief explanation of what happens if this is stopped.
Possibly present the main button as red, if it is a destructive or significant action that will or could be disruptive, if not leave blue.
Changed "Confirm" to the actual action being performed. Also, could have Yes to answer the question but if the text is not read, could be glossed over and problematic.



Severity Level icons for messaging. (See PatternFly icon [here](#).)

- a. In general, these main three levels of severity can be used to coincide with the leveling and types of messages.



Errors



Warnings



Information

I. Stop Node Modal Dialog:

General UI, Usability/High

Changed Title to reflect the action that invoked it

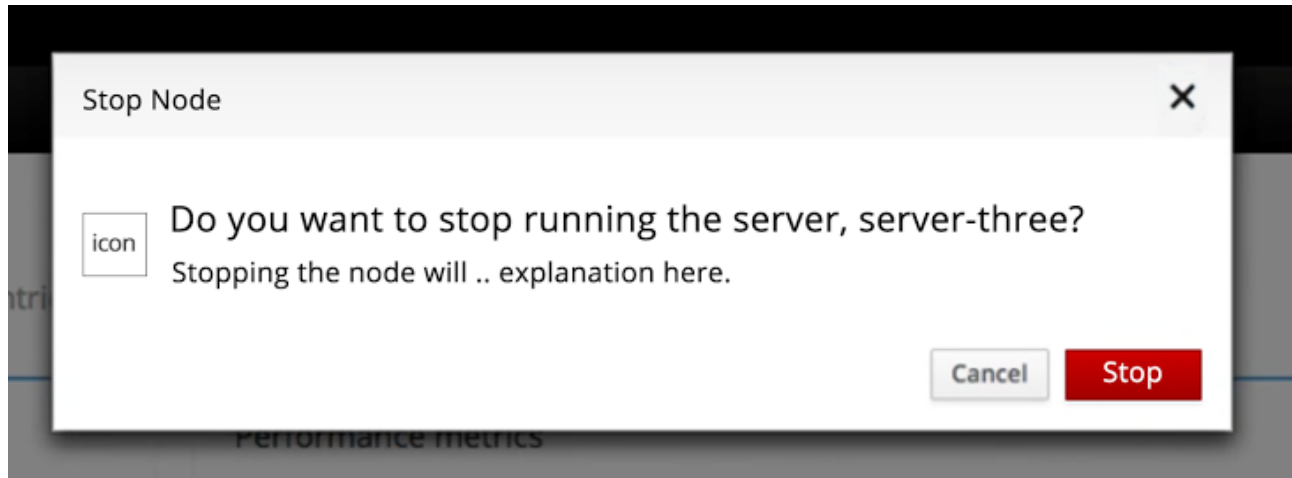
Consider rephrasing text as a question, for conversational dialog.

Provide a brief explanation of what happens if this is removed.

If this is not a reversible action present the main button as red.

Changed "Confirm" to the actual action being performed, remove, as this is sound like a significant action.

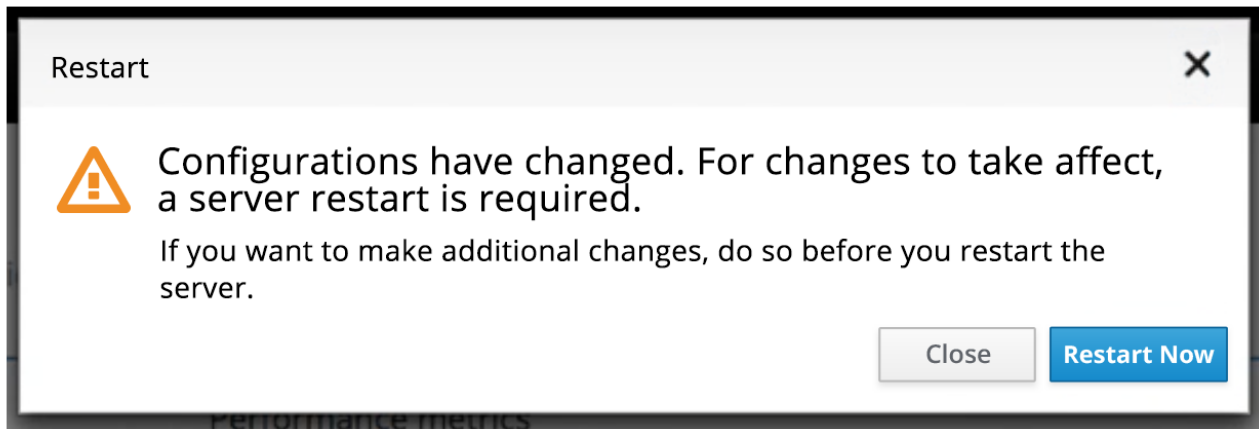
Enlarge and update icon for the severity (as shown below on Severity Messages).
See Message Severity levels... for icon size and leveling.



J. Restart Server Dialog:

Revised text and layout. Accuracy check, based on behaviors, is needed.
Revised action on buttons, as "restart later" could be misunderstood, as when will this happen, is it in a queue... etc?

General UI, Usability/Medium



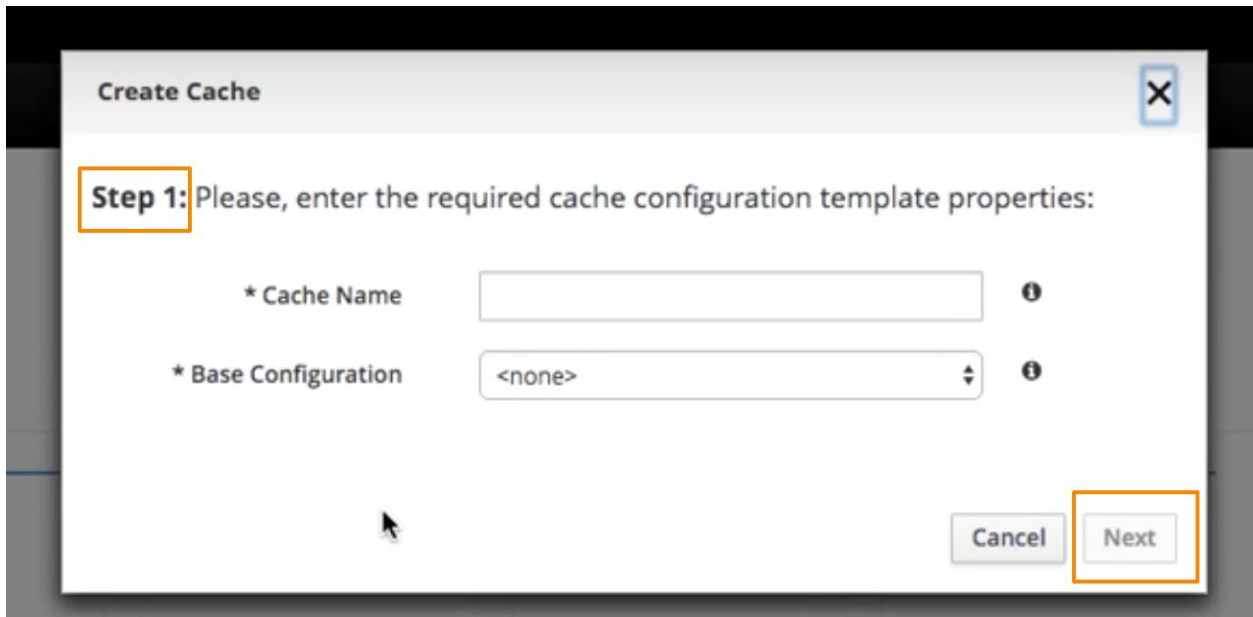
Add new Cache to Cluster

[View Video](#)

Suggestions

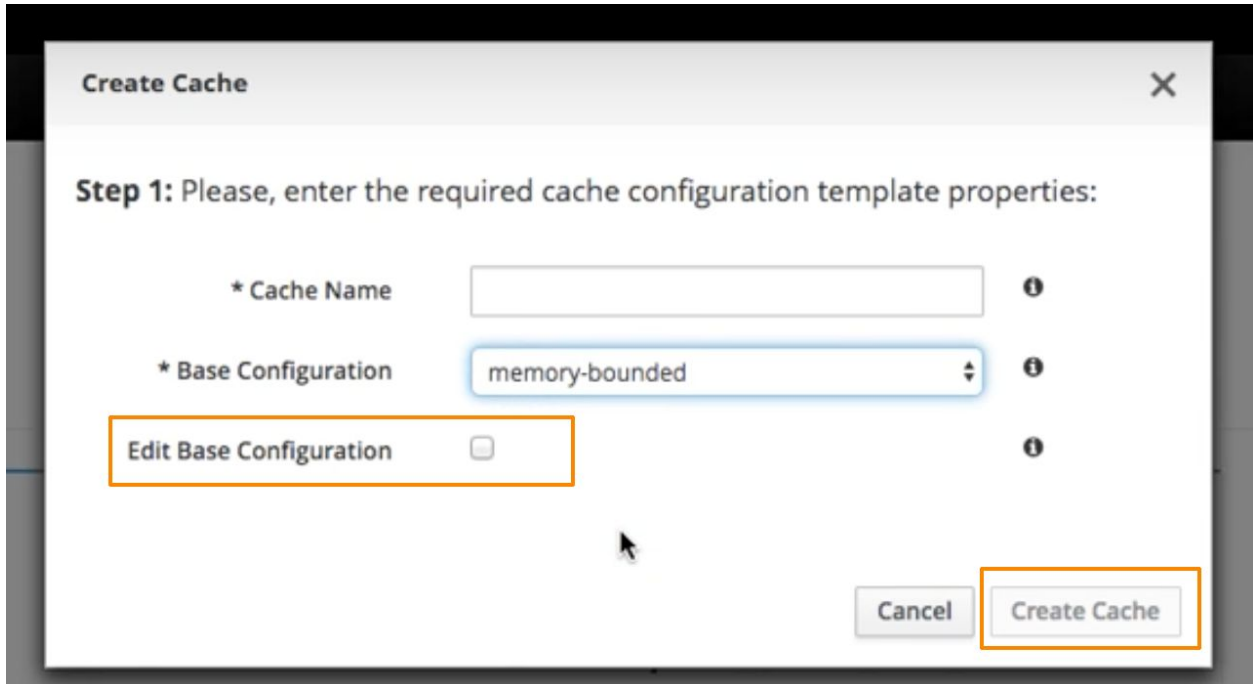
1. Dialog progression and feedback was a little confusing. More of a series of dialogs than a wizard. Wizard UI is [here](#) and usually used for a series of steps with multiple data inputs and or branches.
2. **CURRENT** design is one step... with different modes.

General UI, PatternFly, Usability/High

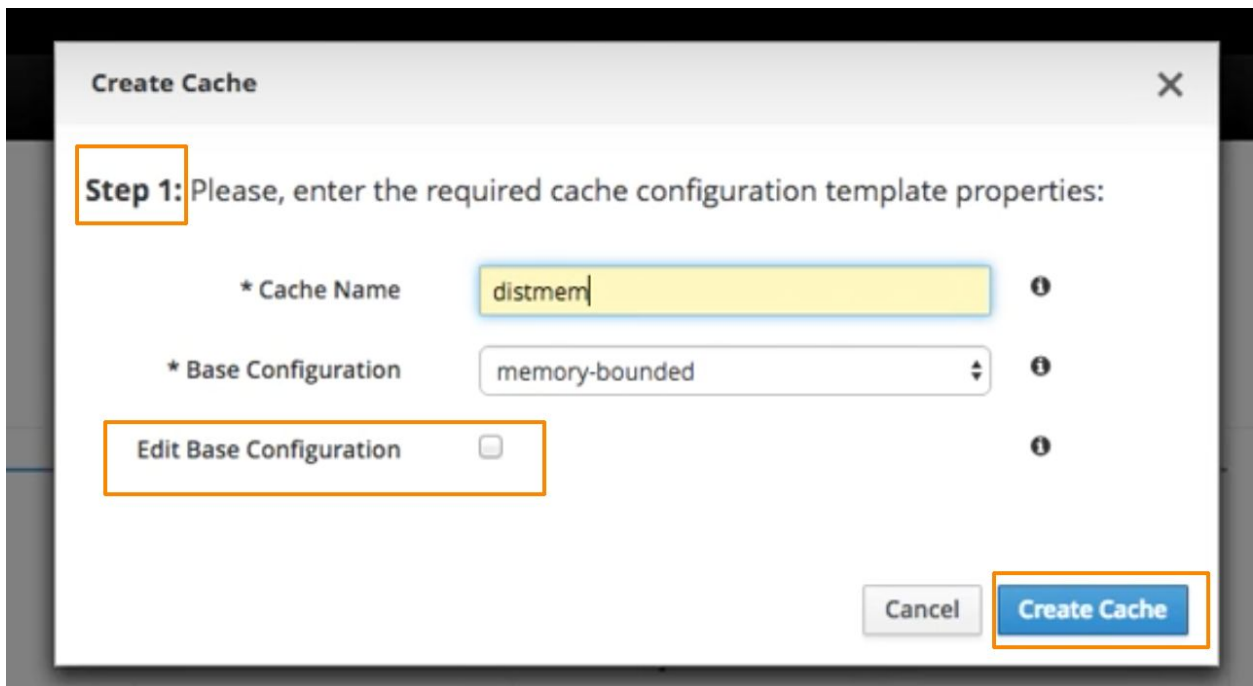


The screenshot shows a dialog box titled "Create Cache" with a close button (X) in the top right corner. The main content area is titled "Step 1: Please, enter the required cache configuration template properties:". Below this title are two required input fields, each with an asterisk and an information icon (i) to its right. The first field is labeled "* Cache Name" and is an empty text box. The second field is labeled "* Base Configuration" and is a dropdown menu currently showing "<none>". At the bottom right of the dialog, there are two buttons: "Cancel" and "Next". The "Next" button is highlighted with an orange border, and the "Step 1:" text is also highlighted with an orange border.

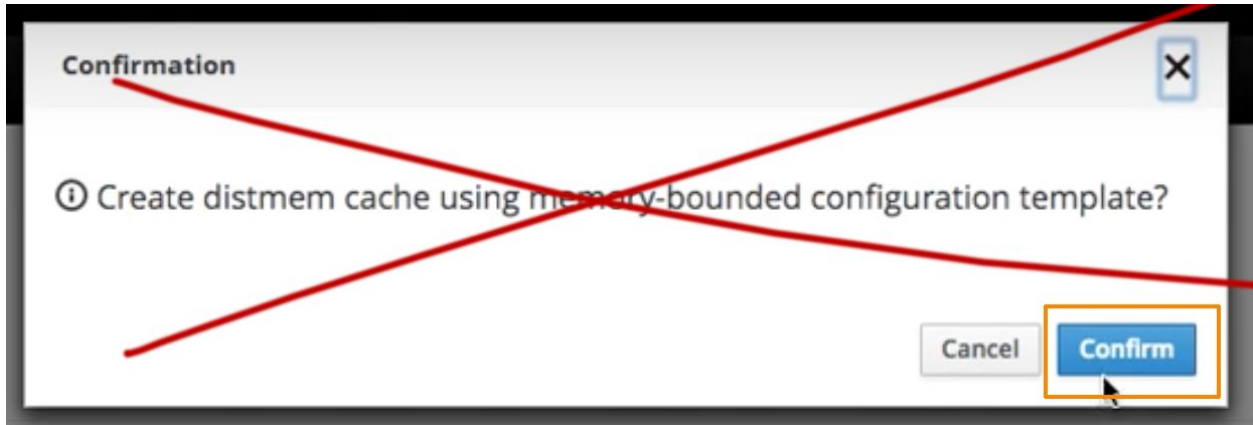
Step 1 with conditional modes of entering name or base configuration. Can't go to the next step until data is completed?



Remains as Step 1 and displays a new widget, conditionally, if a base config is chosen and changes the button, but the button remains disabled until the config is given a name.



Still on step one, now there is no next, but is ready to create the cache.



A confirmation asking if I wanted to create the cache, after I just selected the Create Cache command button. This feels redundant and wondering what the need for it is.

3. **SUGGESTED:** in discussing and exploring the use of a wizard, the wizard here follows along the same process and order of events, that the dialogs presented. The goal of the wizard is to clarify the process, by guiding the user through the steps and explaining the creation process.

Create New Cache ×

Choose Type Name Review

1 ————— 2 ————— 3

Choose Configuration Type

Memory Bounded ▾

The Memory Bounded configuration will allow you to... explain the details here to help the user make an informed decisions and learn what each of these types of configurations are, or do etc....

Cancel < Back Next >

Step 1: User chooses the configuration type and a description of that type can be provided

Create New Cache

Choose Type Name Review

① ————— ② ————— ③

Enter a unique cache name. Numbers, special characters and capital letters are OK to include in the name.

*Name

Description

Optional

Cancel < Back Next >

Step 2: User enters a Name for the Cache, as a required field. The user can enter an optional description, that might be useful?

1. Instructional text around the naming, frames the step and can prevent a guessing game, spawning errors, if there are any restrictions and if not can be informative for the user to understand that.

Create New Cache ×

Choose Type Name Review

① ————— ② ————— ③

Your cache is almost complete!

You can continue creating your cache by editing the configuration, or you can save this cache now and edit at any time.

Name My first cache

Description This is a cool cache that you can use to do all sorts of great things and if you don't you can change it so that you can.

Step 3: User is guided to understanding the choices of save and be done vs. save and continue to tweak the configuration. Offering a "Save + Edit" option will allow the user to cancel out of the editing process, and not have to start from scratch, if they decide not to edit. Save will save the cache and close the wizard.

? List the baseline chosen here?

Cache: Cache Name Here Cancel Save

General

Locking

Memory

Expiration

Indexing

Compatibility

Transactions

Security

Partition handling

State transfer

Loader

Store

Main

Type	<input type="text" value="distributed-cache"/>	ⓘ
Template Name	<input type="text" value="distmem2"/>	ⓘ

Clustering

Mode	<input type="text"/>	ⓘ
Owners	<input type="text" value="2"/>	ⓘ
Segments	<input type="text" value="256"/>	ⓘ
L1 Lifespan	<input type="text" value="0"/>	ⓘ
Capacity Factor	<input type="text" value="1"/>	ⓘ
Remote Timeout	<input type="text" value="15000"/>	ⓘ

Monitoring

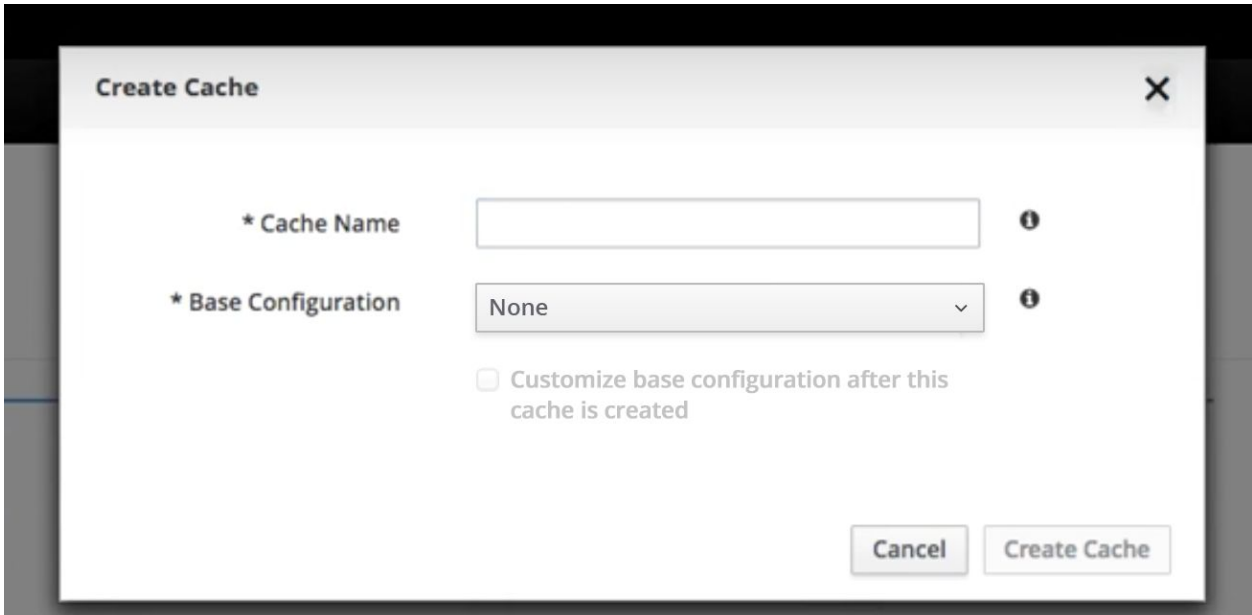
Statistics	<input type="checkbox"/>	ⓘ
Jndi Name	<input type="text"/>	ⓘ

Cancel Save

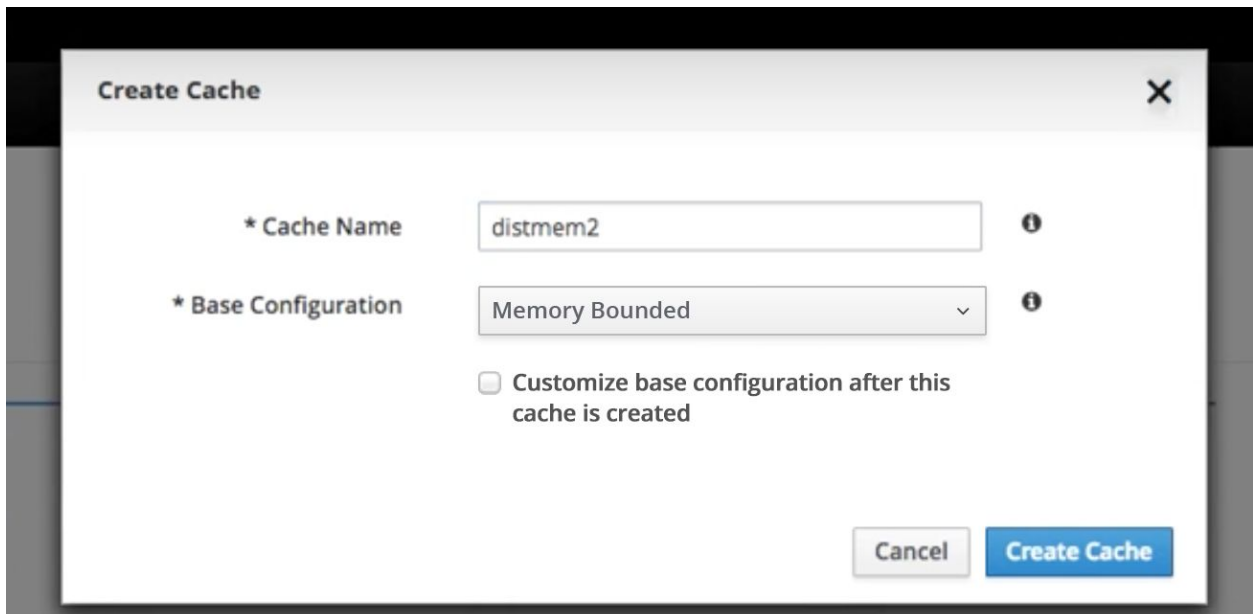
Step 4: If there is not a small subset of attributes to place directly into the wizard widget, or time is tight, taking the user from the Save + Edit step to the attributes page, after saving the Cache and allowing them to continue editing and saving from here, would be a logical option. The Cache Name would be carried forward and if the user changes their mind at this point on editing, the cache has been saved and work is not lost. The buttons Cancel and Save can appear at the top and bottom of the attributes page, to alleviate scrolling to implement the commands, on a long page.

Alternate Suggestion of Dialog Based refinements:

4. Use a single dialog and progressive disclosure, to walk the user through the Cache Creation process.
 - a. Disable the "Edit Base Config" option until a user has selected a configuration, then enable it, rather than hide and show.
 - b. Buttons consistently read Cancel, Create Cache. Enable and disable based on required data.



- c. Enable the Create Cache command once the required data has been entered.



- d. Changed the verbiage of the option to continue editing the configurations, to clarify the task.

5. The action of "Undo" is not clear. Does Undo, clear the text of the field? If yes, a couple of conventional ideas are:

General UI, Usability/Low

Current:

The screenshot shows a configuration panel titled "Clustering". It contains several input fields, each with a help icon (i) to its right:

- Mode: A dropdown menu.
- Owners: A text input field containing the value "2".
- Segments: A text input field containing the value "256".
- L1 Lifespan: A text input field containing the value "0".
- Capacity Factor: A text input field containing the value "1".
- Remote Timeout: A text input field containing the value "20000". This field is highlighted with a yellow background. To its right is a tooltip that says "(Undo) Restart needed".

Idea A:

Include an internal X on the field, that appears once there is focus on the field and clicking it clears any text that currently exists in the field. Once the field is cleared the x is hidden, field is cleared and the blinking cursor appears in the first character of the field.

Populated field

A text input field with a light blue border. The text inside is "Clicking on the X clears out the field". In the top right corner of the field, there is a small "X" icon.

Clear field

An empty text input field with a light blue border. A vertical line with a small horizontal bar at the top indicates a blinking cursor at the beginning of the field.

Idea B:

Or just have a typical highlight and or backspace event to clear text.

A text input field with a light blue border. The text inside is "Highlight and remove the text with backspace". The text is highlighted in black, and there is a small white cursor at the beginning of the text.

6. General feedback on left tab area: (more questions than answers...)

General UI, Usability/High

- a. Consider having Save and Cancel at the top of page, as well as the bottom, so the user does not have to know to scroll down and won't navigate away without confirming changes. (Unless there are checks for this?)

Server Wizard/Dialog

The screenshot shows the Infinispan Server Management Console interface. The top navigation bar includes 'Caches', 'Clusters', and 'Status Events'. The breadcrumb trail is 'Cache Containers > clustered > clustered > Caches > distributed-cache > distmem2'. The main content area is titled 'Create Cache' and features a vertical list of tabs: General, Locking (selected), Memory, Expiration, Indexing, Compatibility, Transactions, Security, Partition handling, State transfer, Loader, and Store. The 'Locking' tab is active, displaying a message: 'Locking not defined' with a plus icon, followed by 'Locking has not been defined for this configuration. Locks will... do something described here.' and an 'Add Lock Definition' button. The bottom status bar shows 'localhost:3000'.

Managing Server Cluster (start/stop cluster)

[View Video](#)

Suggestions

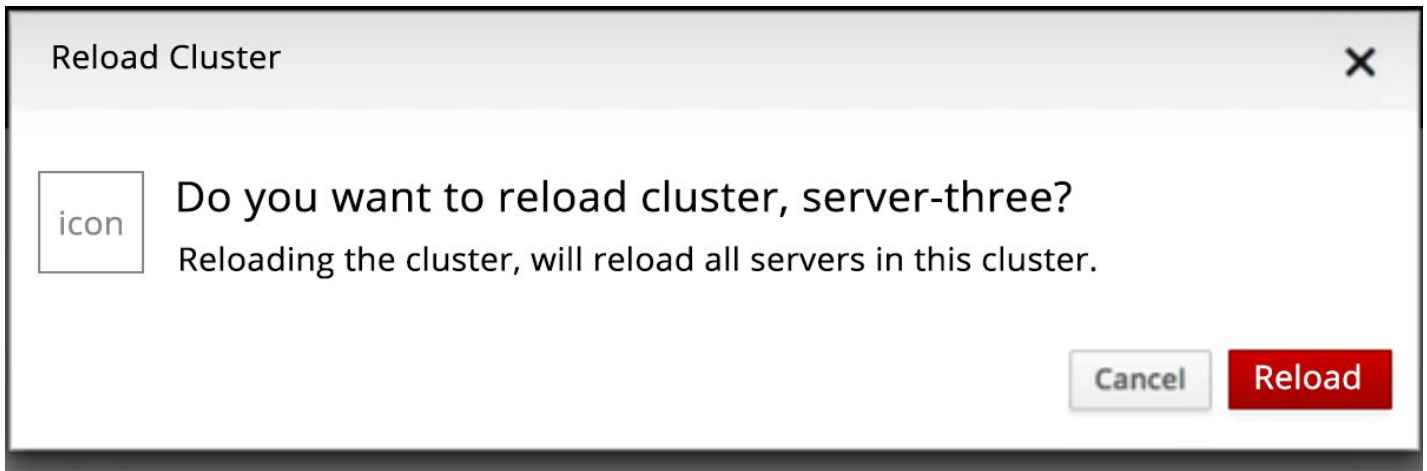
1. Any chance can give feedback on progress for starting and stopping a cluster? Show a simple PatternFly spinner, shown [here](#). This will give feedback that the event is in progress and will prevent the user from trying again, and potentially causing more problems.

General UI, PatternFly, Usability/High

2. Reload dialog verbiage suggestion:
 - a. Adjust verbiage in title, main question, content and button

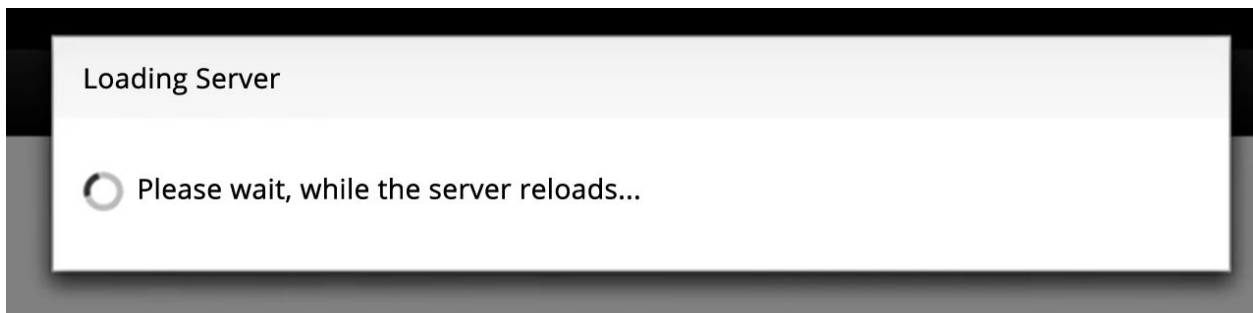
- b. Default selection should not be the close button, should be the default action. If destructive, should be the Cancel button not title area close button.

aGeneral UI, PatternFly/High



3. Use the reload dialog as specified, above and in PatternFly. (Is there no cancel for this process?)

General UI, PatternFly/Medium



4. The listing of the status in the table only maps to the severity, by color.
 - a. Use the icon in the header or in the table as well to build the relationship between the two beyond color, as color may not be seen by everyone.
 - b. Added iconography + adjusted layouts to the cards.
 - c. Add icon to the RELOAD header, to build a visual association with which clusters need to be reloaded.
 - d. Layout and formatting of the cards, modified to align with the PatternFly card standards, specified [here](#).

RELOAD-REQUIRED Cluster: cluster

Nodes

Quick search:
Type name, IP address, .

Add Node

Server-one master
Coordinator
127.0.0.1

Server-two master
127.0.0.1

5. Carry icon presentation through to the higher level list view of the clusters.

General UI, PatternFly/Medium

- Use severity icon on Status, rather than just color
- Present text counts for Hosts and Nodes, as just numbers, without graphics.
- Not a standard PF table, not sure if needed?
- Include kabob icon for menu commands, on a line item, to address accessibility. Also, to address ease of use, in not having to drill down a level to access commands for the cache's listed.
- e.

Domain

Clusters Not PF List... (?)

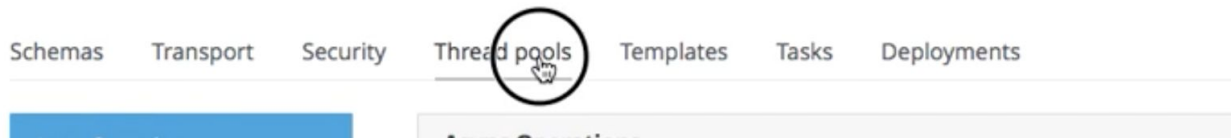
Name	Status	# Hosts	# Nodes
cluster	 Reload required	1	2

Open
Reload
Remove

6. Secondary tab systems, use blue (pf-blue-400 #0088ce) to underline the tab, currently, in focus. See PatternFly standards [here](#). The Cache container config table tabs, do not highlight which tab the user is on. Or is the list of Configurations all types or just templates, as nothing is selected ?

General UI, PatternFly/Low

Cache container configuration



Add new Cache to Cluster - Template

[View Video](#)

Suggestions

1. Is "Remove" on the list of Templates remove or delete? Remove implies that the user can get this back and delete can be more final and user cannot get anything back. See PatternFly terminology guides [here](#).

Add new Server Node - Dialog

Current

Proposed

Add New Server Node [X]

Add a new server node to... explanation or instruction can go here to inform the user.

* Name:

* Host:

Post offset:

J...V....M..... (JVM) Options >

Cancel Add

1. Is this Add or Create?
2. Provide an explanation or instruction to assist or guide the user on creating a new server node.
3. By Default only display the most frequently needed/used attributes to add a new server.
4. Suggestion to spell out JVM and then parenthesize the acronym for reference.
5. Have the JVM attributes be a dynamic expandable area to hide and show the attributes, as they are not as commonly used and will streamline the add node process, yet still be discoverable.
6. (Java Virtual Machine)

Add New Server Node ✕

Add a new server node to... explanation or instruction can go here to inform the user.

* Name:

* Host:

Post offset:

J...V....M..... (JVM) Options v

Stack:

Heap:

Agent lib:

Agent path:

JVM options:

System properties:

1. The JVM information would expand and display when the title is expanded.
2. This would not be a sticky setting and each time the user returned to this dialog, the JVM options would appear collapsed.
3. If helpful, the JVM section could have a brief description or instructional sentence, that would appear below the JVM title, as well.