

**nathenharv...** \*\*\*\*\* MEETING STARTS \*\*\*\*\*

**holoway** jonlives: you want to be decider today, and I'll get myself situated with whats been going on? 12:03 PM

**jonlives** holoway: sure 12:03 PM

**nathenharv...** Agenda for today: <https://github.com/chef/chef-community-irc-meet...> 12:03 PM

**jonlives** ok, first up we have a community update from nathenharvey 12:04 PM

**nathenharv...** hello everyone! weekly reminder about the cookbook survey -<http://bit.ly/chefconf2015-cookbook-survey> 12:04 PM

Community Summit is Oct 14-15 in Seattle 12:05 PM

I'll be in London over the weekend and early next week scouting locations for the London summit which will likely be the second week of November 12:05 PM

**jonlives** whee 12:06 PM

**ssd7** wooot 12:06 PM

**nathenharv...** Some of us will be meeting up Saturday night for drinks. lmk if you can join us 12:06 PM

**martinisoft** yay :) 12:06 PM

\*marks out calendar for summit\* 12:06

		PM
nathenharv...	Microsoft announced Ignite 2016 last week. Ignite is their big tech conference. and they announced it for the same dates as what we have planned for ChefConf	12:07 PM
jkeiser	Doh	12:07 PM
nathenharv...	so...the dates of ChefConf 2016 will likely change	12:07 PM
jonlives	that's irksome	12:07 PM
adamedx	I'm sure once they see the chefconf date, they will wisely change theirs	12:07 PM
kierrr	oof	12:07 PM
moted	:(	12:07 PM
nathenharv...	we're playing a game of chicken with Microsoft. I'm pretty sure they'll end up moving to accommodate us.	12:07 PM
stevenmur...	to be fair, that's pretty much the same week as they always have had teched	12:08 PM
	it's usually been right around mother's day	12:08 PM
nathenharv...	yeah, so, stay tuned on that. and that's the community update for today	12:08 PM
jonlives	thanks nathenharvey! ok, next we have updates on client & server etc from adamedx	12:08 PM

**adamedx**

hello

12:08

PM

my part of the update: we are working on a chefdk release for early next week

12:09

PM

with additional goodness around policyfile support

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**jonlives**

ooh nice

12:09

PM

**adamedx**

and now

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PM

I turn it over to ssd7 and mparadise

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PM

for some server fun

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**ssd7**

First, our apologies for not sending out an update on the status of 12.1.0 before this.

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The release has been delayed because our Hosted environment and a couple of our high-scale users have seen evidence of serious performance regressions. We want to fix these regressions before the 12.1.0 RC.

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We deployed a new build with performance fixes to Hosted yesterday and will likely deploy some more fixes today. These changes are looking good so far, but we are still looking over the results and need to follow up with the user reports to ensure that they also address the issues seen by those users.

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If you want or need to start testing the 12.1.0 release immediately, you can test the builds that we publish to the "current" packagecloud.io repository:

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<https://packagecloud.io/chef/current>

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	That's all from me. mparadise I think has things to say about one of the RFCs which comes a little later. (Unless you want to add something else to that ^)	12:11 PM
jonlives	anything for the server update mparadise?	12:12 PM
adamedx	yeah	12:12 PM
	I think that can wait until the rfc discussion	12:12 PM
	ssd7 thank u for update	12:12 PM
mparadise	ssd has covered it well for the server/12.1 update.	12:12 PM
jonlives	ok - so a bunch of the stuff on the agenda was merged as it was approved last week and / or an rfc template	12:12 PM
	so the first new one is this tweak to the chef server API RFC: <a href="https://github.com/chef/chef-rfc/pull/123">https://github.com/chef/chef-rfc/pull/123</a>	12:12 PM
mparadise	There are two significant changes beyond some minor corrections in this PR. This have come about as we've begun implementing client-side support for the header.	12:13 PM
	*these	12:13 PM
	First: Previously if you did not specify an X-Ops-Server-API-Version, it would default to the minimum supported version. Now, it will default to 0 - and if 0 is below the minimum supported version, it will reply with a 406. This allows us to ensure that clients that aren't version aware can't perform requests with the possible expectation of old/removed behaviors.	12:13 PM
	Second: All responses will now contain a header X-Ops-Server-API-Version in the form { "min_version":A,	12:14

"max\_version":B, "request\_version": X, "response\_version": Z}.

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request\_version is the version that the client requested, and response\_version is the version used to service the request. These will generally match except in

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cases of an unsupported/invalid request version, or when no header is present in the request.

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**jonlives**

is defaulting to 0 likely to break any API clients that we know of at this point?

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**mparadise**

We introduced this so that we had a means of knowing from the client whether or not we are talking to a server that has knowledge of versioning - if it does not know about versions, the header will be missing.

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Release 12.1 will deprecate the X-Ops-API-Version-Info header, which is obsoleted by the new header.

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jonlives: eventually, yes.

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**holoway**

mparadise: eventually what? it will break them?

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**mparadise**

When the server revs to a point where version 0 support is dropped, old clients will not be permitted to make requests

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**kallistec**

jonlives, mparadise but only when version 0 is retired

12:15

PM

at which point they would've broken anyway

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**holoway**

right

12:15

PM

**jonlives**

I think we need to communicate that very carefully then, because that means release X will suddenly cause all non-updated clients to break

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<b>holoway</b>	in the same way if we hadn't had it	12:15
		PM
	ie:the version 0.6 Server API doesn't neccessarily work any more	12:15
		PM
<b>kallistec</b>	jonlives: right, that'd be a 13.0 or 14.0	12:16
		PM
<b>jonlives</b>	gotcha	12:16
		PM
<b>mparadise</b>	If we hadn't, it could cause partial breakages or unexpected behaviors on clients that don't know about versioning.	12:16
		PM
<b>jonlives</b>	could we specify in the RFC that said change would need to be in a major release, if we didn't already?	12:16
		PM
<b>martinisoft</b>	jonlives: +1 on that addition *searches through RFC*	12:17
		PM
<b>mparadise</b>	The RFC doesn't address when those fall in product release cycles,but I think the product lifecycle RFC could be updated for this?	12:17
		PM
<b>jonlives</b>	mainly I'm thinking that this would be pretty dramatic breakage so it'd be good to clarify explicitly that this will be in a major release	12:18
		PM
<b>mparadise</b>	Alright, I can add that.	12:18
		PM
<b>jonlives</b>	sweet	12:18
		PM
<b>ssd7</b>	So, to be clear, nothing in this RFC currently would break existing clients. The goal was explicitly to not break existing clients. I imagine that deprecating v0 would be another RFC some point in the far future.	12:19
		PM

<b>jonlives</b>	aaah I see	12:20 PM
<b>kallistec</b>	or just a natural event in the release cycle	12:20 PM
<b>jonlives</b>	I missed that part	12:20 PM
<b>kallistec</b>	except that we now have a much better way of talking about it	12:20 PM
<b>holoway</b>	ya	12:20 PM
<b>jonlives</b>	i thought that defaulting to 0 would break stuff straight away, my bad.	12:20 PM
<b>ssd7</b>	kallistec: Right, we can choose when and how to deprecate v0, if ever.	12:20 PM
<b>lamont_oc</b>	this also lets the server support v0 and v1 and v2 at the same time and makes it easier to not break old clients when we have to implement v1	12:20 PM
<b>jonlives</b>	ok I feel better about this now then	12:20 PM
<b>kallistec</b>	yeah, v0 is "same behavior as a month ago"	12:21 PM
<b>jonlives</b>	ok with that said then, feedback on the PR has been many +1s, does anybody have any objections to approving this one?	12:21 PM
<b>lamont_oc</b>	otherwise shipping v1 would be a breaking change that would drop support for v0 suddenly and be a major change. now its a minor bump as long as v0 can still be supported.	12:21 PM

<b>mparadise</b>	lamont_oc: yes. And good thing, because 12.1 will be API v1 :)	12:22 PM
<b>jonlives</b>	last chance for any -1s or I'm a-merging this one	12:22 PM
	ok, 'tis approved.	12:23 PM
	will merge after the meeting	12:23 PM
<b>holoway</b>	woot	12:23 PM
<b>jonlives</b>	next we have <a href="https://github.com/chef/chef-rfc/pull/118">https://github.com/chef/chef-rfc/pull/118</a> - last week we said that if chef-config was close to releasable by this meeting we'd proceed with that as the implementation - update from kallistec?	12:23 PM
<b>kallistec</b>	lemme find the PR for chef-config	12:23 PM
	<a href="https://github.com/chef/chef/pull/3270">https://github.com/chef/chef/pull/3270</a>	12:24 PM
<b>github-bawt</b>	[13chef-rfc] 15jonlives closed pull request #123: Fix small mistake and add min / max headers to versioning rfc. (06master...06tc/update-versioning-rfc) 02 <a href="http://git.io/vUv3g">http://git.io/vUv3g</a>	12:24 PM
<b>kallistec</b>	status is, specs pass on Unix and Windows (or at least appveyor windows)	12:24 PM
<b>lamont_oc</b>	yeah, its very nearly there	12:24 PM
<b>kallistec</b>	kitchen tests do not pass b/c we need one extra build step to install the chef-config gem	12:24 PM



	and a similar change will be required to omnibus-software	12:25 PM
jonlives	excellent. in which case, does anybody have any objections to continuing with chef-config instead of approving #118?	12:25 PM
kallistec	aside from that I don't foresee any roadblocks	12:25 PM
lamont_oc	yeah, lets do it	12:26 PM
adamedx	+1	12:26 PM
jonlives	sweet	12:26 PM
lamont_oc	RFC wise, do we want to do a new one to specify exactly what format the config used by chef-config for ohai will take?	12:26 PM
lamont_oc	i think we have that separately already?	12:26 PM
thom	+1	12:27 PM
ranjib	yeah. thats in the existing RFC already	12:27 PM
jonlives	which RFC?	12:27 PM
	ranjib: did you mean that's in #118 or a different one?	12:28 PM

ranjib	118	12:28 PM
jonlives	aaah ok,.	12:28 PM
	right, so we approve #118, with chef-config as the implementation that enables it.	12:29 PM
	do we need any changes to #118 in light of chef-config now being a thing?	12:29 PM
kallistec	with chef-config being a thing, we can use the config_context mechanism instead of Ohai::Config	12:29 PM
jonlives	i think we're gonna need to remove references to client.rb and ohai.rb etc	12:30 PM
	kallistec: could you take a look over #118 and tweak it to match what chef-config will make it look like then?	12:30 PM
	then we can mergerate it	12:30 PM
kallistec	for comparison, here is the chef_zero config context <a href="https://github.com/chef/chef/blob/master/lib/chef/">https://github.com/chef/chef/blob/master/lib/ch...</a>	12:30 PM
	in your config file you write chef_zero.port = 1974	12:31 PM
	jonlives: I will work with BTM on that	12:31 PM
jonlives	awesome thanks	12:31 PM

holoway: for context there, we were vetting if chef-config was going to be do-able instead of needing to look at another way to implement #118

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turns out it is, so yay :p

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**holoway** dope

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**jonlives** that's it for the official agenda - jkeiser has added <https://github.com/chef/chef-rfc/pull/126> and <https://github.com/chef/chef-rfc/pull/127>, and suggested that since today is a bit of a light meeting we could chat about them a bit

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**someara** re: #126 - is this different than the current compile\_time stuff?

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**jkeiser** someara: this can be set at the recipe or cookbook level

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**someara** because .run\_action has been a thorn since it was introduced.

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PM

was really hoping to see it go away completely

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**jkeiser** It is similar to compile\_time in chef\_gem, but applicable to everything

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**jonlives** jkeiser: what's the motivation for #126 out of curiosity? that part is still boilerplate :p

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it seems to break the compile time / converge time distinction to me at first glance, curious as to the use case

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**jkeiser** jonlives: the motivation is that the compile/converge model confuses and trips up users frequently, and the solutions to it are unclear

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jonlives	is the eventual aim of this to merge the two stages then or something?	12:36 PM
jkeiser	The idea is to let people live in an immediate mode if they would like to, without affecting other cookbooks and users	12:36 PM
	jonlives: I would like to, yes--but that'll be a whole nother conversation when it happens :)	12:37 PM
jonlives	hehe	12:37 PM
jkeiser	A number of people would like to	12:37 PM
	This gives us the path, and lets users live in that model if they want to, so they can concentrate on their code	12:37 PM
holoway	jkeiser: I feel like this could be a huge mess	12:38 PM
jonlives	I'm a little unsure if I like making the two stages more fuzzy in this way - it's gonna produce some cookbooks with decidedly non-default behaviour in terms of when stuff runs in them.	12:38 PM
jkeiser	The spec's job is to say how you can put resources and recipes into immediate mode, and to specify how that interacts with the rest of the world	12:38 PM
jonlives	my initial read is that this might *add* confusion.	12:38 PM
holoway	I also have to say that I think the "trips up users" thing is overblown, but we could actually do some study to figure that out	12:38 PM
jonlives	i mean, I get where it's coming from, but it's allowing optional breaking of a fairly central paradigm of the way chef works.	12:39 PM

jkeiser	Sure. I see questions about it constantly, frustration and confusion from users of provisioning for example	12:39 PM
holoway	and it'll be completely opaque	12:39 PM
someara	I'm having trouble groking this one without having actually lived in the New Resource World yet	12:39 PM
jkeiser	Completely opaque?	12:39 PM
holoway	and how do notifications work?	12:40 PM
jkeiser	It's in the spec	12:40 PM
holoway	yeah - there will be no way to work together	12:40 PM
	with things that don't work in "immediate" mode	12:40 PM
jkeiser	Nah, they can. All notifications work the same, with one exception	12:40 PM
	If your resource runs immediately, and you try to send an immediate notification to a resource that hasn't been compiled yet, you can't do that	12:40 PM
jonlives	wouldn't this also mean that the resource collection would potentially be incomplete when a resource executes? you'd have to be very sure that everything it used was loaded prior to the "immediate" part	12:40 PM
holoway	what if the resource hasn't been defined?	12:40 PM

jkeiser	^^	12:41 PM
holoway	right	12:41 PM
jkeiser	If the resource hasn't been defined, then you can send a delayed notification to it	12:41 PM
holoway	breaking, to be blunt, the *entire model in which you can declare things*	12:41 PM
someara	"run_resources :immediately` is not infectious"	12:41 PM
	see, I'd expect it to be	12:41 PM
jonlives	but you're then sending a delayed notification to something which may not exist	12:41 PM
holoway	it *has* to be infectious to be sane	12:41 PM
	but then you remove all the ability to handle the things the resource collection can allow you to do	12:41 PM
jkeiser	jonlives: this is an issue?	12:42 PM
jonlives	and since it hasn't been loaded yet, you don't know if it *will* exist.	12:42 PM
holoway	hell yeah its and issue	12:42 PM

jonlives	jkeiser: it would make for very confusing errors	12:42 PM
jkeiser	jonlives: yeah, we resolve it when we resolve all other delayed notifications	12:42 PM
	I don't think it would. I think the error would look identical	12:42 PM
holoway	it's the timing	12:42 PM
jkeiser	And happen at exactly the same point	12:42 PM
holoway	I think this creates a mess that you can't walk back from	12:42 PM
	we either have a model where you declare the resources you want	12:43 PM
kallistec	I think you can paper over the notification thing by some sort of `only_if_dependend_resource_updated` "resource[foo]"	12:43 PM
holoway	or we have a model where you don't have a resource collection at all	12:43 PM
	and things execute immediately after definition	12:43 PM
	but living in the middle world is going to be fraught with ridiculous peril	12:43 PM
	one person turns on immediate mode	12:43 PM

jkeiser	holoway: but what if you want to also be able to notify those resources? I think a resource collection still makes sense	12:43 PM
holoway	and all bets are off on the actual order	12:43 PM
jonlives	I don't like the idea that compile time would become "where things are loaded apart from sometimes where they run too"	12:43 PM
ranjib	+1. we need to post installation <-> pre execution hook	12:44 PM
holoway	my point is we need to be either all in or not	12:44 PM
jonlives	and also what holoway said is very true - order matters is a lot harder if a resource might run at compile time instead	12:44 PM
holoway	if we have usability problems with the resource collection, fin	12:44 PM
	but you are fucking with order, and the order matters	12:44 PM
jkeiser	Order matters a lot, yeah	12:44 PM
	That's why the current system is so confusing	12:44 PM
holoway	no	12:44 PM
someara	at the same time, you *do* often need to converge before compiling a resource collection	12:44 PM



<b>holoway</b>	it's why the current system works	12:44 PM
<b>ranjib</b>	something like initializers .. to cleanly support this style .. else it screws the whole notification/resource collection/two phase mental modes.	12:45 PM
<b>jonlives</b>	i really don't think the current system is confusing though - I think we can better communicate what it does and why though.	12:45 PM
<b>holoway</b>	*or* its why a system without a resource collection works	12:45 PM
<b>nathenharv...</b>	5 minute warning	12:45 PM
<b>lamont_oc</b>	i'd like to see this as a global setting for a given resource collection at least	12:45 PM
<b>someara</b>	what about per-recipe compile/converge cycles?	12:45 PM
<b>jkeiser</b>	If you write X, Y, and Z statements in your code, then the system currently runs Y first if it's not a resource, and X and Z after. Out of order	12:45 PM
<b>holoway</b>	what I'm against isn't the idea that we can get to a functionally useful system that gives you what you want	12:45 PM
<b>jkeiser</b>	Out of order execution is the root of the confusion	12:46 PM
<b>holoway</b>	jkeiser: that's because you are not being declarative	12:46 PM
<b>lamont_oc</b>	so then we could turn it on for a whole LWRP and that wouldn't cause any issues with the execution of the main resource collection	12:46 PM

holoway	I see why its a problem	12:46 PM
jkeiser	Yeah, so question: if we can turn it on for an entire resource collection rather than selectively, what does that do?	12:46 PM
jonlives	that problem won't go away here, it'll just let you write even *more* confusing recipes where some of the resources run out of order too :p	12:46 PM
holoway	if you want to fix that confusiuon	12:47 PM
jkeiser	Like, let's just say, "main recipes don't get to run serially"	12:47 PM
holoway	either everything moves to the model where it executes	12:47 PM
	immediately after declaration	12:47 PM
	or make Chef be more clear that you probably don't get what you expect	12:47 PM
	but when, for example, I declare a function	12:47 PM
	I don't get pissed off that it didn't run immediately	12:48 PM
jkeiser	That's the thing, a function is sort of a template, you know it won't run because you have to pass more input to it for it to even do its job	12:48 PM
	A resource isn't like that, it *looks* like you've specified everything you need	12:48 PM

nathenharv...	2 minutes left	12:48 PM
holoway	jkeiser: not for nothing, but what do you think a resource is?	12:48 PM
	jkeiser: a resource is EXACTLY like that	12:48 PM
	that's why we declare them	12:49 PM
	it's one reason it's *not just a fancy makefile*	12:49 PM
jkeiser	holoway: so what are the parameters you later pass in order to instantiate the resource?	12:49 PM
holoway	jkeiser: it's not about parameters you pass, it's about when to execute the function (which you already know)	12:49 PM
	but I'm missing my point for the weeds	12:49 PM
	a hybrid makes it worse, not better	12:50 PM
	this won't be less confusing	12:50 PM
jkeiser	Yeah. I'll retool around non-hybrid	12:50 PM
holoway	it will be more	12:50 PM

jkeiser	Message heard	12:50 PM
	So think about this for next time:	12:50 PM
holoway	and given that we have literally thousands of people who seem to be able to cope with the way it is, and have modeled lots of complexity in it	12:50 PM
	changing it needs to meet a wicked high bar	12:50 PM
jkeiser	People live in the world they are given	12:50 PM
	Especially when it's hard to change that world	12:51 PM
holoway	because the potential for *complete chaos* is very high	12:51 PM
jkeiser	If this proposal existed, but was controlled a flag on the run context could be enabled by the user doing the run (*before* it started), how would that affect things	12:52 PM
nathenharv...	we are at time	12:53 PM
jkeiser	Like, if you could say even on a whole Chef run, `Chef::Config.immediate_mode`--and we would either error or warn if you tried to forward-reference something with an :immediate notification--no other changes	12:53 PM
	Thanks all, that was super useful :)	12:53 PM
kallistec	also, no one responded to someara, but 'what about per-recipe compile/converge cycles?' if we got there first, then per-recipe immediate converge would be less chaos	12:53 PM

jkeiser	Yeah, run_recipe is that actually	12:53 PM
holoway	kallistec: assuming each cycle was isolated and run in order, that would be just fine	12:53 PM
kallistec	if we intended to do that we'd need to be very sure that's where we want to go	12:54 PM
jkeiser	Are you saying you're actually cool with each recipe in an existing run_list having its own compile/converge cycle?	12:54 PM
kallistec	so I really want to see what immediate mode feels like in real life	12:54 PM
holoway	I'm saying it doesn't break the model of predictable, understandable order	12:54 PM
jkeiser	I think that's a fair objection :)	12:54 PM
holoway	because at least for a given run list X, I know that it will run in X	12:54 PM
	in a hybrid mode, I don't	12:55 PM
jkeiser	I will get rid of all semblance of mixed modes	12:55 PM
kallistec	otherwise we'd be incrementing to a thing that IMO sounds good but may not actually be good	12:55 PM
holoway	1,2,3 could have 3 run before 1	12:55 PM

	and that's totally unacceptable	12:55
		PM
jkeiser	Totally on board	12:55
		PM
ranjib	how does cross recipe resource notifications work in per-recipe compile/converge style	12:55
		PM
holoway	ranjib: it wouldn't	12:55
		PM
	would be my guess	12:55
		PM
	(I wouldn't do per-recipe, I would probably have comparable run lists)	12:55
		PM
someara	I feel like we should have a tool to visualize resource collections	12:55
		PM
	this stuff makes my head hurt	12:56
		PM
kallistec	ranjib: yeah, we'd have to reverse it so you do a subscribes but internally we don't convert the subscribe to a notify	12:56
		PM
ranjib	hence i was trying to suggest.. what about a notification free stage	12:56
		PM
kallistec	where "convert the subscribe to a notify" is what occurs now	12:56
		PM
jkeiser	Yeah, I worry about the per-recipe thing more than I worry about a full-run immediate mode	12:56
		PM

<b>holoway</b>	me too	12:56 PM
<b>kallistec</b>	it'd have to be more like a specialized only_if, as I said	12:56 PM
<b>ranjib</b>	i.e. initializers,, use chef dsl., but not two phase style	12:56 PM
<b>jkeiser</b>	There is a way we could go about getting a feel for this that doesn't break the whole world actually: we could feature-flag it with Chef::Config.immediate_mode (or something) that makes it clear it could go away, and let people get a feel for living in the world by enabling it	12:57 PM
<b>holoway</b>	I think there isn't any argument (I don't have one, anyway) that doesn't say a world where I can have my cake and eat it to, in terms of being able to say the value of a resource paramter is `cat /tmp/poop` where /tmp/poop comes from a resource	12:57 PM
<b>kallistec</b>	also another thing for me is that I really wouldn't want this behavior change tucked away in a metadata setting I would want to see it in the file	12:57 PM
<b>nathenharv...</b>	Let's keep this discussion going and it'll obviously be part of next week's meeting. But we need to end this meeting today to respect everyone's calendar	12:57 PM
<b>holoway</b>	is good	12:57 PM
	sure	12:57 PM
	released :)	12:58 PM
<b>jkeiser</b>	holoway: if you could take a look at the other RFC as well, that'd be nice :)	12:58 PM
<b>nathenharv...</b>	**** MEETING ENDS **** (but the conversation continues)	12:58

