



A Love Letter to Ansible Core 2.19

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ANSIBLE



- Biggest pull request ever
- Biggest changelog fragment ever
- Biggest porting guide ever
- Longest-delayed feature ever



It's a Good Thing!



DEAR ANSIBLE,

I LOVE OUR TIME TOGETHER AUTOMATING ALL THE THINGS. YOU MAKE IT PRETTY EASY TO SIT DOWN AND GET THINGS DONE QUICKLY, AND YOU USUALLY JUST DO WHAT I MEAN. WE ALL MAKE MISTAKES, THOUGH, AND YOUR RESPONSE TO MY MISTAKES OFTEN DOESN'T FEEL VERY HEALTHY. IT'S REALLY FRUSTRATING WHEN YOU CAN'T CLEARLY COMMUNICATE WHERE OR WHY SOMETHING WENT WRONG AND WHAT I SHOULD DO TO FIX IT. JUST TALK TO ME!

LOVE,

LOOKING FOR ERRORS IN ALL THE WRONG PLACES



Demo 2.18 template_error.yml

Better Error Messages



- Data Tagging provenance
- Standardized error handlers



Demo 2.19 template_error.yml



DEAR ANSIBLE,

I KNOW THE ONLY CONSTANT IS CHANGE, BUT YOU'RE NOT ALWAYS THE
BEST ABOUT TELLING ME WHEN I'M DOING THINGS I NEED TO CHANGE,
ESPECIALLY WHEN I'M USING RETURN VALUES AND MAGIC VARIABLES THAT
ARE DEPRECATED.

ALWAYS,

CH-CH-CH-CHANGES



- Warning-on-use is now possible
 - Deprecated module return values, magic vars!
- Standard contextual error handling



Demo 2.19 deprecated.yml



DEAR ANSIBLE,

TRUTH IS AN IMPORTANT FOUNDATION OF OUR RELATIONSHIP. YOU
SOMETIMES HAVE STRANGE NOTIONS OF TRUTH THAT MAKE IT HARD TO
TRUST YOUR CHOICES.

TRULY,

YOUR BOOLEAN BAE



- "Truthy" (non-boolean) conditionals are sneaky and dangerous!
- Ansible just lets them slide
- Leads to unpredictable behavior



Demo 2.18 broken_conditionals.yml



- Error by default
 - safest approach, since Jinja Native mode could yield a different result
- Usually trivial tweak to work on all ansible-core versions
- Numerous community complaints, until they found the bugs
- **Most common upgrade trip hazard**
- Temporary downgrade to warning via
`ANSIBLE_ALLOW_BROKEN_CONDITIONALS=1`



Demo 2.19 broken_conditionals.yml



DEAR ANSIBLE,

I LOVE THE POWER AND FLEXIBILITY YOU PROVIDE WITH JINJA EXPRESSIONS, BUT SOMETIMES I THINK YOU'RE TRYING TOO HARD TO LOOK FOR THINGS IN MY RESULTS THAT AREN'T THERE. CAN YOU JUST LEAVE MY DATA ALONE?

SINCERELY,

NOTHING BETWEEN THE LINES



- Jinja is a text templating language
- Ansible did 😱 things to support complex data structures in Jinja
 - 🎯 accidental type conversions
- Pre-2.19 Ansible uses Python `literal_eval` on all Jinja results
 - Can trash data types and turn strings into ... other things
 - Any string that looks enough like a Python int, float, tuple, dict, list...



Demo 2.18 type_wtf.yml



- 2.19+ fixed the bugs in Jinja Native (optional since 2.5)
- **Jinja Native is the default and only option**
- No more literal_eval!
 - No more  accidental conversions
- Some unsupported hacks no longer work
 - e.g. stuff | to_json



Demo 2.19 type_wtf.yml



DEAR USER,

I HOPE I'VE PROVEN TO YOU THAT EVEN OLD TOOLS CAN LEARN NEW TRICKS. I KNOW THINGS HAVEN'T BEEN PERFECT FOR US, BUT WE CAN GET A LOT OF THINGS DONE TOGETHER.

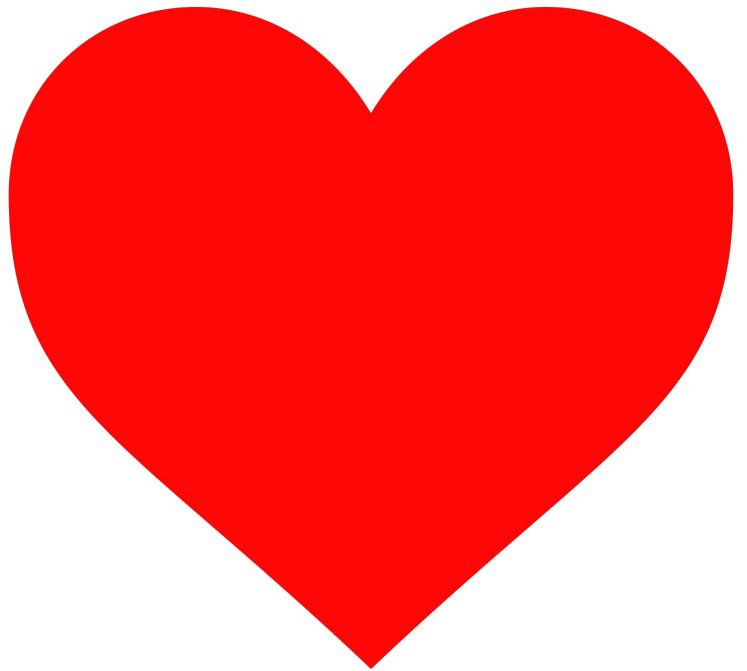
I PROMISE TO TRY HARDER TO COMMUNICATE EVERYTHING I KNOW WHEN SOMETHING GOES WRONG. I MAY NOT BE ABLE TO FIX IT FOR YOU, BUT I CAN MAKE IT EASIER FOR YOU TO FIND AND FIX.

I KNOW MODULE RETURNS AND OTHER THINGS NEED TO EVOLVE, AND I PROMISE TO GIVE YOU PLENTY OF HEADS-UP WHEN I KNOW YOU'RE USING SOMETHING THAT WILL NEED TO CHANGE.

I'M NOT GOING TO JUST SILENTLY SWEEP BROKEN CONDITIONALS UNDER THE RUG ANYMORE- BUT YOU ALSO NEED TO BE CLEAR ABOUT WHAT YOU WANT. I PROMISE I'LL TELL YOU WHEN YOU'RE NOT BEING CLEAR.

I'M GOING TO STOP TRYING TO OVER-INTERPRET YOUR DATA, SO YOU'LL NEED TO BE EXPLICIT ABOUT WHAT YOU NEED THERE.

I HOPE YOU CAN SEE HOW I'M TRYING TO CHANGE FOR THE BETTER, AND I CAN'T WAIT FOR OUR NEXT CHANCE TO MAKE BEAUTIFUL AUTOMATION TOGETHER.



Questions?



Thanks!

Feedback via red.ht/ansible-contributors-summit
Forum: <https://forum.ansible.com/>

Matrix:

#community:ansible.com

#social:ansible.com

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