



Toolforge webservices are in the final stages of [migrating to the toolforge.org domain](#).  
Please help us clean up older documentation referring to tools.wmflabs.org!

# Incident documentation/20150519-RESTBase

[< Incident documentation](#)

## Contents [\[hide\]](#)

- [1 Summary](#)
- [2 Timeline](#)
- [3 Conclusions](#)
- [4 Actionables](#)

## Summary

The deployment of <https://gerrit.wikimedia.org/r/#/c/198433/> brought down the RESTBase service for around 30 minutes, due to the parallel execution of Puppet agents across the RESTBase eqiad cluster. During this period, all of RESTBase's users were affected - VE, OCG, CXServer.

## Timeline

- 2015-05-19 13:08: mobrovac thinks he disabled Puppet on restbase100x
- 2015-05-19 13:09: godog merges <https://gerrit.wikimedia.org/r/#/c/198433/>
- 2015-05-19 13:11: mobrovac notices RESTBase cannot start up on restbase1001 due to Cassandra time-outs in select queries
- 2015-05-19 13:16: mobrovac retries with a modified config (with simplified consistency), but no change
- 2015-05-19 13:20: icinga reports RESTBase's unavailability
- 2015-05-19 13:25: \_joe\_ joins the investigation
- 2015-05-19 13:36: mobrovac realises he didn't really disable Puppet, so all nodes were fighting to create the new keyspaces
- 2015-05-19 13:39: godog reverts <https://gerrit.wikimedia.org/r/#/c/198433/> (in <https://gerrit.wikimedia.org/r/211982/>)
- 2015-05-19 13:42: \_joe\_ runs and then disables Puppet on the nodes, RESTBase is now up
- 2015-05-19 14:11: mobrovac removes all of the offending keyspaces manually from Cassandra
- 2015-05-19 14:15: mobrovac starts one RESTBase instance manually which creates the keyspaces correctly
- 2015-05-19 14:33: \_joe\_ re-merges the patch (as <https://gerrit.wikimedia.org/r/211993/>)
- 2015-05-19 14:36: \_joe\_ disables Puppet and runs it sequentially on each node, \_joe\_ and mobrovac monitor the progress
- 2015-05-19 14:43: the new configuration is applied on all nodes and RESTBase and Cassandra are up and running this new version

## Conclusions

This particular patch required the creation of new keyspaces in Cassandra, which does not handle parallel keyspace and table creation well. As all of the RESTBase services were restarted automatically by Puppet almost at the same time, they were fighting for this creation process, effectively rendering the cluster unavailable. Thus, when there is such a code/config change, gradual application of changes, rolling restarts and periodic checks of the previous steps are imperative.

## Actionables

- Short-term:
  - Do not allow Puppet to automatically restart RESTBase (<https://gerrit.wikimedia.org/r/#/c/212016/>)
  - On a config-change deploy, wait for Puppet to install the new version, and then run a second RESTBase instance which brings Cassandra to the desired state
- Long-term:

[Main page](#)  
[Recent changes](#)  
[Server admin log \(Prod\)](#)  
[Server admin log \(RelEng\)](#)  
[Deployments](#)  
[SRE/Operations Help](#)  
[Incident status](#)

[Cloud VPS & Toolforge](#)

[Cloud VPS documentation](#)

[Toolforge documentation](#)

[Request Cloud VPS project](#)

[Server admin log \(Cloud VPS\)](#)

[Tools](#)

[What links here](#)

[Related changes](#)

[Special pages](#)

[Permanent link](#)

[Page information](#)

[Cite this page](#)

[Print/export](#)

[Create a book](#)

[Download as PDF](#)

[Printable version](#)

- Streamline service deployment, specifically automating the rolling change application and restart (bug [T93428](#))

Category: [Incident documentation](#)

This page was last edited on 20 May 2015, at 08:17.

Text is available under the [Creative Commons Attribution-ShareAlike License](#); additional terms may apply. See [Terms of Use](#) for details.

[Privacy policy](#) [About](#)

[Disclaimers](#) [Code of Conduct](#) [Developers](#) [Statistics](#) [Cookie statement](#) [Mobile view](#)

[Wikitech](#)

