**Report for Issue:** [**30104**](https://github.com/elastic/elasticsearch/issues/30104) **- Remove support for 2x role formats**

File Changes are in GitHub branch [-](https://github.com/denisanzora/ElasticSearch581/tree/davidkelly-84613) [davidkelly-30104](https://github.com/denisanzora/ElasticSearch581/tree/davidkelly-30104)

Steps for the fix:

1. Pre/post-factoring activities
   1. Setup up a local environment to run the application.
   2. Make sure all tests run.
   3. Make corrective changes to remove code not needed.
   4. Fix any method calls that broke due to signature change.
   5. Modify existing unit tests.
2. Issue localization
   1. Study to the issue and look for comments by other Elasticsearch developers. I found other issues that were similar and that were fixed to help find a location in the code.
   2. I searched for key words such as “2x” and followed the method calls.
3. Change impact analysis and assessment criteria
   1. The strategy for a fix was to remove code using 2x logic. I also refactored by changing the signature where the parameter was not needed.
   2. Files changed:

See [davidkelly-30104](https://github.com/denisanzora/ElasticSearch581/tree/davidkelly-30104).

1. Clarity of the report
   1. There were no repro steps except to remove the code but gave methods to look in such as FileRolesStore and the RoleDescriptor classes.
2. The choice of techniques and design decisions
   1. My decision for a fix was to remove the code not needed and then make sure the tests still pass.
3. Build and run Elasticsearch locally.
4. Run the units again after the changes. See Appendix for the results.
5. Tools:
   1. Intellij was the IDE.
   2. Java and JUnit
6. Commits pushed to branch [-](https://github.com/denisanzora/ElasticSearch581/tree/davidkelly-84613) [davidkelly-30104](https://github.com/denisanzora/ElasticSearch581/tree/davidkelly-30104) – note: commits were squashed to 1 commit. This is a requirement to do a PR for Elasticsearch.
   1. [removed support for 2x role formats](https://github.com/denisanzora/ElasticSearch581/commit/1075353a2a21e2562b598d9ef8ed56913857f134)
7. Code Review conducted by Garhgaj and Denis.

**Appendix**

1. Test results – all tests passed in Elasticsearch is 14507! The 1 failure is “A required privilege is not held by the client” and not relevant to my changes.

