C++ Declarative API & `pyxrootd` within XROOTD

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Abstract—A brief description of the **xrootd** architecture and its purpose within the WLCG group, together with an overview of the server- and client- sides of the xrootd framework are provided within the present work. The client side of xrootd has a relatively new implementation called Declarative API. Its main purpose is to provide the user an asynchronous interface that is more inline with the modern C++ paradigm. A focus on the development workflow for this API is given. Moreover, the **pyxrootd** package, which provides a python interface with the xrootd client, is also discussed and tested in a usual file-operation use case.

Index Terms—xrootd, pyxrootd, asynchronous programming, declarative API, pipeline, server, client.

I. INTRODUCTION

II. CONCLUSION

The following work was provided

APPENDIX A

Appendix one text goes here.

APPENDIX B

Appendix two text goes here.

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REFERENCES

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