

pyxrootd & C++ Declarative API 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 usecase.

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

I. INTRODUCTION

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II. CONCLUSION

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APPENDIX A

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APPENDIX B

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REFERENCES

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