

Protocol

The Bit Repository protocol supports standard archive operations initiated by clients - Put, Get, Replace, Delete - as well as operations for working on lists of files - GetFileIDs, GetChecksums, GetAuditTrails. It also supports a special operation for monitoring Bit Repository components. Finally it supports the exchange of Alarm messages, which can be initiated by any Bit Repository component.

The following pages will describe the message flow and formats, before describing each operation in detail.

Message exchange protocol

- [Message flow](#) — Describes the general messageflow in communication between the Bit Repository components.
- [Protocol messages](#) — Description of the different protocol messages, which operation it applies to, and their types.
- [Message format](#) — Description of the the XML basic message structure and format.

File Exchange protocol

The file exchange is used to transfer large or binary data, like e.g. the files stored in the Bit Repository or large results from requests.

Protocol versioning

Describes how a system of components supporting different versions of the protocol should work.

Operations descriptions

Documentation of the different operation primitives that the protocol describes

- [DeleteFile](#) — Operation to remove a file from one or more pillars in a collection
- [GetAuditTrails](#) — Operation to retrieve audittrails for a specific collection from one or more contributors
- [GetChecksums](#) — Operation to get checksums from one or more pillars in a given collection.
- [GetFile](#) — Operation to retrieve a single file from a collection.
- [GetFileIDs](#) — Operation to get fileIDs from one or more pillars in a given collection.
- [GetFileInfos](#)
- [GetStatus](#) — Operation to retrieve status from components in a repository
- [PutFile](#) — Operation to ingest a file on one or more pillars in a collection.
- [ReplaceFile](#) — Operation to replace a file on one or more pillars in a collection.

Design Decisions - Protocol

Documentation archive

- [Operations](#) — Documentation of the different operations available to use for clients.
- [Return all parameters from request in responses](#)
- [Unhandled protocol Use cases](#) — Use cases covering protocol, e.g. XML versioning