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# Communications Protocol

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## Abstract

This document defines the communication protocol used by the clients and servers in the collaborative spreadsheet. The protocol is designed to enable multiple users (clients) to edit a spreadsheet simultaneously in such a way that all changes are reflected in real-time for all clients. This protocol defines the behavior of the server and clients and the messages that are exchanged.

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## 1 Introduction

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## 2 Common Client-Server interactions

### 2.1 Managing Spreadsheets

The protocol defines four basic commands that manipulate spreadsheets as unit: create, delete, rename and list. Every spreadsheet is identified by an *id* and associated with a *name* that need not be unique. The *name* is primarily for display purposes, while the spreadsheet *id* is used to identify it in all operations pertaining to a specific spreadsheet.

#### 2.1.1 Creating a new spreadsheet

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#### 2.1.2 Deleting a spreadsheet

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#### 2.1.3 Renaming a spreadsheet

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#### 2.1.4 Listing all spreadsheets

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### 3 Messages

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