Worse Alternative Trading System (WATS) Specification

# Version 1.0

# May 26, 2025

# Contents

Introduction

Purpose

WATS Architecture Overview

Matching Engine Architecture

Design Decisions and Justifications

Matching Engine Processes

Add Order Ingestion

Trade Message Ingestion

Cancel Order Ingestion

3 - 6

3

4

5

6

7 - 9

7

8

9

# Introduction

## Purpose

The purpose of the Worse Alternative Trading System is to [INSERT PURPOSE HERE]

## WATS Architecture Overview

[INSERT ARCHITECTURE DESCRIPTION HERE]

A diagram of a computer program

AI-generated content may be incorrect.

## Matching Engine Architecture

[INSERT MATCHING ENGINE DESCRIPTION AND ARCHITECTURE]

## Design Decisions and Justifications

1. Having a matching engine router
2. Having trade messages passed-through by the matching engine
3. Using Boost flat map for the price priority
4. Using deque for time priority

# Matching Engine Processes

## Add Order Ingestion

Stuff

A diagram of a trade

AI-generated content may be incorrect.

## Trade Message Ingestion

Stuff

A diagram of a couple of circles

AI-generated content may be incorrect.

## Cancel Order Ingestion

Stuff

A diagram of a process

AI-generated content may be incorrect.