Consistent Time (CT)

## Overview

The Consistent Time Integration Profile (CT) provides a means to ensure that the system clocks and time stamps of the many computers in a network are well synchronized. This profile specifies synchronization with a median error less than 1 second, which is sufficient for most purposes.

Various infrastructure, security, and acquisition profiles require use of a consistent time base on multiple computers, to synchronize logs, authenticate users, digitally sign documents, etc.

Actors and Transactions

The following diagram provides an overview of the CT profile Actors, Transactions and their interactions.
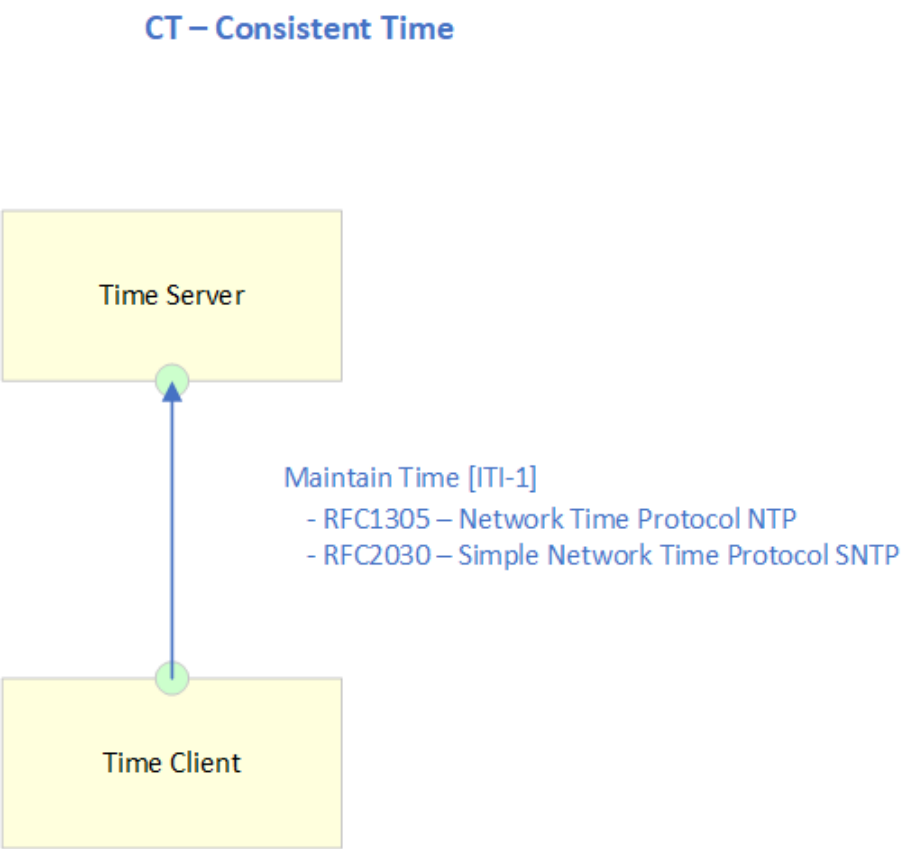
The table below lists the transactions for each actor directly involved in the CT profile. To claim compliance with CT, an actor shall support all required transactions (labeled "R").

Actor	Transaction	Optionality
Time Client	Maintain Time [ITI-1]	R
Time Server	Maintain Time [ITI-1]	R

Transactions

- Maintain Time [ITI-1] - Uses NTP (RFC1305) or SNTP (RFC4330) time service responses to maintain synchronization with Time Servers and maintain the local system clock.

Sequence Diagram

CT		CT
CT Time Client		CT Time Server

CT Maintain Time [ITI-1] →

← OK