

ADO <> Jira Cloud: Date time sync

If your Jira and ADO are hosted in different time zones, and you need to manipulate the date/time fields so that the same date is kept, here is how we do it. Let us assume:

- "Due Date" and "Start Date" are custom date/time fields in ADO
- "Start date" is a custom Date field in Jira
- Due is the standard due date field in Jira
- We would like to add 5 hours to the Jira timestamp when they are received in ADO
- We would like to subtract 3 hours to the ADO timestamp when they are received in Jira (just as an example)

Jira Outgoing Script

```
replica.customFields."Start date" = issue.customFields."Start date"  
replica.due = issue.due
```

Jira Incoming Script

```
import java.text.SimpleDateFormat  
import java.text.DateFormat  
import java.util.Calendar  
import java.util.Date  
  
def datePattern = "yyyy-MM-dd HH:mm:ss";  
DateFormat formatter = new SimpleDateFormat(datePattern);  
dateString = replica."start"  
dateString = dateString.replaceAll("T"," ").trim();  
dateString = dateString.replaceAll("Z"," ").trim();  
date = formatter.parse(dateString);  
def timestamp = date.time  
Calendar calendar = Calendar.getInstance()  
calendar.timeInMillis = timestamp  
calendar.add(Calendar.HOUR_OF_DAY, -5)  
def updatedTimestamp = calendar.timeInMillis  
issue.customFields."Start date".value = updatedTimestamp  
  
dateString = replica."duedate"  
dateString = dateString.replaceAll("T"," ").trim();  
dateString = dateString.replaceAll("Z"," ").trim();  
date = formatter.parse(dateString);  
timestamp = date.time  
calendar.timeInMillis = timestamp  
calendar.add(Calendar.HOUR_OF_DAY, -5)  
issue.due = calendar.getTime()
```

ADO Outgoing Script

```
replica."start" = workItem."Microsoft.VSTS.Scheduling.StartDate"  
replica."duedate" = workItem."Microsoft.VSTS.Scheduling.DueDate"
```

Jira Outgoing Script

```
import java.text.SimpleDateFormat
import java.util.Calendar
import java.util.Date

def convertJiraTimeToAdoTime(String dateString){
    if(dateString == null) return
    String inputFormat = "yyyy-MM-dd HH:mm:ss.S"
    String outputFormat = "yyyy-MM-dd'T'HH:mm:ss'Z'"

    // Create SimpleDateFormat objects for the input and output formats
    SimpleDateFormat inputDateFormat = new SimpleDateFormat(inputFormat)
    SimpleDateFormat outputDateFormat = new SimpleDateFormat(outputFormat)

    // Parse the input date string into a Date object
    Date date = inputDateFormat.parse(dateString)

    def timestamp = date.time
    Calendar calendar = Calendar.getInstance()
    calendar.timeInMillis = timestamp
    calendar.add(Calendar.HOUR_OF_DAY, 5)
    def updatedTimestamp = calendar.timeInMillis

    // Convert the Date object into the output format
    return outputDateFormat.format(updatedTimestamp) // String
}

// does not set the field
String inputDateString = replica.customFields."Start date"?.value
workItem."Microsoft.VSTS.Scheduling.StartDate" = convertJiraTimeToAdoTime(inputDateString)
inputDateString = replica.due
workItem."Microsoft.VSTS.Scheduling.DueDate" = convertJiraTimeToAdoTime(inputDateString)
```