

# Resource availability and calendar Part2

## Table of Contents

Introduction.....	1
Test calendar and resource .....	1
XOGing and other changes in availability .....	3
Further availability changes.....	4
CONCLUSION 1 .....	7
XOGing shifts .....	8
CONCLUSION 2 .....	9

## Introduction

This document explores changing the resource availability and the calendar with XOG.

## Test calendar and resource

For the purposes of this exploration a new Test\_calendar is created with one shift 8:00 - 15:00.

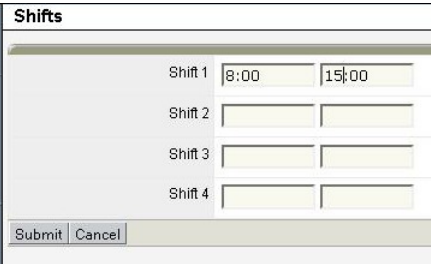
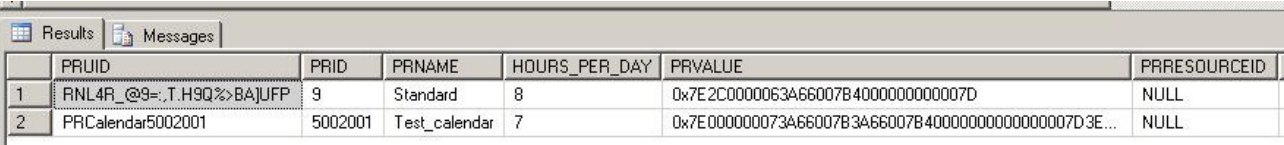


Fig Test\_calendar shift

The new calendar appear in prcalendar table and has 7 hours per day



	PRUID	PRID	PRNAME	HOURS_PER_DAY	PRVALUE	PRRESOURCEID
1	RNL4R_@9=,T.H9Q%>BAJUFP	9	Standard	8	0x7E2C0000063A66007B4000000000007D	NULL
2	PRCalendar5002001	5002001	Test_calendar	7	0x7E000000073A66007B3A66007B40000000000000007D3E...	NULL

Fig 7 hours availability is in prcalendar table

I am not aware of any method to get the daily values from the prvalue field other than opening the daily shifts for each day from the calendar. The values can be different from day to day.

The Test\_calendar is selected as the resource calendar

**Edit Resource Calendar** (Resource - Labor: Test Calendar)

Properties Skills Allocations Document Manager **Calendar**

Base Calendar: Test\_calendar Save

April 2013

To specify the same week day in the entire calendar, check a day

☒ Make Workday ☒ Make Non-Workday ☒ Reset to Base ☒ Set Sh

Fig The Test\_calendar set as the resource calendar.

That makes the resource availability is then 7 hours on properties page (You don't have to set the availability as it comes from the calendar).

**Resource: Properties: Main - General** (Resource-Labor: Test Calendar)

Properties Skills Allocations Document Manager **Calendar**

Main Contact Information Financial

Save Submit Cancel

Properties

General

Access to this Resource

Full View

Resource

Group

OBS Unit

General

Last Name: Calendar

First Name: Test

Resource ID: cal

Email Address: jotakin

Primary Role:

Category:

Employment Type: Employee

External: ☐

Date of Hire:

Date of Termination:

Availability: 7,00

Input Time Code:

Fig Resource availability from the resource calendar

DAILYRESOURCEAVAILCURVE slices are consequently 7 hours

	last_name	first_name	unique_name	slice_date	DAILYRESOURCEAVAILCURVE
1	Calendar	Test	cal	2013-04-01 00:00:00.000	7.000000
2	Calendar	Test	cal	2013-04-02 00:00:00.000	7.000000
3	Calendar	Test	cal	2013-04-03 00:00:00.000	7.000000
4	Calendar	Test	cal	2013-04-04 00:00:00.000	7.000000
5	Calendar	Test	cal	2013-04-05 00:00:00.000	7.000000
6	Calendar	Test	cal	2013-04-06 00:00:00.000	0.000000
7	Calendar	Test	cal	2013-04-07 00:00:00.000	0.000000
8	Calendar	Test	cal	2013-04-08 00:00:00.000	7.000000
9	Calendar	Test	cal	2013-04-09 00:00:00.000	7.000000
10	Calendar	Test	cal	2013-04-10 00:00:00.000	7.000000
11	Calendar	Test	cal	2013-04-11 00:00:00.000	7.000000
12	Calendar	Test	cal	2013-04-12 00:00:00.000	7.000000
13	Calendar	Test	cal	2013-04-13 00:00:00.000	0.000000
14	Calendar	Test	cal	2013-04-14 00:00:00.000	0.000000
15	Calendar	Test	cal	2013-04-15 00:00:00.000	7.000000

Fig A set of slice values from DAILYRESOURCEAVAILCURVE

Now everything is set up for testing.

## XOGing and other changes in availability

When the test resource is XOG read the output is

```
<?xml version="1.0" encoding="UTF-8"?>
<NikuDataBus xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="../xsd/nikuxog_resource.xsd">
  <Header action="write" externalSource="NIKU" objectType="resource" version="12.1.1.1208"/>
  <Resources>
    <Resource employmentType="EMPLOYEE" externalId=" "
      includeInDatamart="true" isActive="true" isExternal="false"
      managerUserName="kinnunenad" resourceId="cal"
      resourceType="LABOR" username="cal">
      <PersonalInformation displayName="Calendar, Test"
        emailAddress="jotakin" firstName="Test" lastName="Calendar"/>
      <ManagementInformation availability="7"
        openForTimeEntry="false" trackMode="None"
        userFlag1="false" userFlag2="false"/>
      <General addedBy="kinnunenad" addedDate="2013-04-04"/>
      <OBSAssocs completed="false"/>
      <SkillAssocs/>
      <Calendar baseCalendar="Test_calendar" resetCalendar="false"/>
    </Resource>
  </Resources>
</NikuDataBus>
out test resource
```

The same is written back with 6 hour availability. After XOGing the availability on resource properties is 6 hours

The screenshot shows a web-based interface for managing resource properties. The title bar reads 'Resource: Properties: Main - General (Resource-Labor: Test Calendar)'. Below the title bar are tabs for 'Properties', 'Skills', 'Allocations', 'Document Manager', and 'Calendar'. The 'Properties' tab is active, and within it, the 'Main' sub-tab is selected. A sidebar on the left lists 'Properties' with a sub-item 'General'. The main content area is titled 'General' and contains several fields: 'Last Name' (Calendar), 'First Name' (Test), 'Resource ID' (cal), 'Email Address' (jotakin), 'Primary Role' (empty), 'Category' (empty), 'Employment Type' (Employee), 'External' (checkbox), 'Date of Hire' (empty), 'Date of Termination' (empty), and 'Availability' (6,00). At the top of the main content area are 'Save', 'Submit', and 'Cancel' buttons.

Fig Resource availability 6 hours after XOGing

The DAILYRESOURCEAVAILCURVE also shows 6 hour availability.

	last_name	first_name	unique_name	slice_date	DAILYRESOURCEAVAILCURVE
1	Calendar	Test	cal	2013-04-01 00:00:00.000	6.000000
2	Calendar	Test	cal	2013-04-02 00:00:00.000	6.000000
3	Calendar	Test	cal	2013-04-03 00:00:00.000	6.000000
4	Calendar	Test	cal	2013-04-04 00:00:00.000	6.000000
5	Calendar	Test	cal	2013-04-05 00:00:00.000	6.000000
6	Calendar	Test	cal	2013-04-06 00:00:00.000	0.000000
7	Calendar	Test	cal	2013-04-07 00:00:00.000	0.000000
8	Calendar	Test	cal	2013-04-08 00:00:00.000	6.000000
9	Calendar	Test	cal	2013-04-09 00:00:00.000	6.000000
10	Calendar	Test	cal	2013-04-10 00:00:00.000	6.000000
11	Calendar	Test	cal	2013-04-11 00:00:00.000	6.000000
12	Calendar	Test	cal	2013-04-12 00:00:00.000	6.000000
13	Calendar	Test	cal	2013-04-13 00:00:00.000	0.000000
14	Calendar	Test	cal	2013-04-14 00:00:00.000	0.000000
15	Calendar	Test	cal	2013-04-15 00:00:00.000	6.000000

Fig A set of slice values from DAILYRESOURCEAVAILCURVE

The problem is that the resource calendar is still the same Test\_calendar and the shifts there are 7 hours. However, no problems this far assuming that the availability used in resource planning comes from the prj\_resource.pravail curve and not from the calendar.

### *Further availability changes*

Say the resource will start working again with 8 hour shifts like the other resources. Consequently the resource could be again associated to the Standard calendar with 8 hour shifts.

Resource Shifts (Resource - Labor: Test Calendar)	
Shift 1	8:00 12:00
Shift 2	13:00 17:00
Shift 3	
Shift 4	
<input type="button" value="Submit"/> <input type="button" value="Cancel"/>	

Fig The resource is associated with the standard calendar again.

**The availability on the resource properties page is 6.86** (as can be expected depending on whom you ask).

**Resource: Properties: Main - General** (Resource-Labor: Test Calendar)

Properties Skills Allocations Document Manager Calendar

Main Contact Information Financial

Save Submit Cancel

Properties

General

Access to this Resource

- Full View
- Resource
- Group
- OBS Unit

Last Name Calendar

First Name Test

Resource ID cal

Email Address jotakin

Primary Role

Category

Employment Type Employee

External

Date of Hire

Date of Termination

Availability 6,86

Fig Resource availability 6.86

That is also reflected in the DAILYRESOURCEAVAILCURVE slices

	last_name	first_name	unique_name	slice_date	DAILYRESOURCEAVAILCURVE
1	Calendar	Test	cal	2013-04-01 00:00:00.000	6.857143
2	Calendar	Test	cal	2013-04-02 00:00:00.000	6.857143
3	Calendar	Test	cal	2013-04-03 00:00:00.000	6.857143
4	Calendar	Test	cal	2013-04-04 00:00:00.000	6.857143
5	Calendar	Test	cal	2013-04-05 00:00:00.000	6.857143
6	Calendar	Test	cal	2013-04-06 00:00:00.000	0.000000
7	Calendar	Test	cal	2013-04-07 00:00:00.000	0.000000
8	Calendar	Test	cal	2013-04-08 00:00:00.000	6.857143
9	Calendar	Test	cal	2013-04-09 00:00:00.000	6.857143
10	Calendar	Test	cal	2013-04-10 00:00:00.000	6.857143
11	Calendar	Test	cal	2013-04-11 00:00:00.000	6.857143
12	Calendar	Test	cal	2013-04-12 00:00:00.000	6.857143
13	Calendar	Test	cal	2013-04-13 00:00:00.000	0.000000
14	Calendar	Test	cal	2013-04-14 00:00:00.000	0.000000
15	Calendar	Test	cal	2013-04-15 00:00:00.000	6.857143

Fig A set of slice values from DAILYRESOURCEAVAILCURVE

Did not go as exactly as planned. OK put back Test\_calendar as resource calendar and change the availability on resource properties to 8.0

**Resource: Properties: Main - General** (Resource-Labor: Test Calendar)

Properties Skills Allocations Document Manager Calendar

Main Contact Information Financial

Save Submit Cancel

**General**

Access to this Resource

- Full View
- Resource
- Group
- OBS Unit

Last Name Calendar

First Name Test

Resource ID cal

Email Address jotakin

Primary Role

Category

Employment Type Employee

External ☐

Date of Hire

Date of Termination

Availability 8,00

Fig The resource availability set back to 8.00 hours

The shifts are still 7 hours.

**Resource Shifts** (Resource - Labor: Test Calendar)

Shift 1 8:00 15:00

Shift 2

Shift 3

Shift 4

Submit Restore Defaults Cancel

Fig The shifts in resource calendar.

If that did not work, the thing to try is to associate the resource with the Standard calendar again.

**Resource Shifts** (Resource - Labor: Test Calendar)

Shift 1 8:00 12:00

Shift 2 13:00 17:00

Shift 3

Shift 4

Submit Cancel

Fig The resource is associated with the standard calendar with 8.00 hour shifts.

Now the resource availability is now 9.14 hours so that did not work either



**Resource: Properties: Main - General** (Resource-Labor: Test Calendar)

Properties Skills Allocations Document Manager Calendar

Main Contact Information Financial

Save Submit Cancel

Properties

General

Access to this Resource

- Full View
- Resource
- Group
- OBS Unit

Last Name Calendar

First Name Test

Resource ID cal

Email Address jotakin

Primary Role

Category

Employment Type Employee

External

Date of Hire

Date of Termination

Availability 9,14

Fig Resource availability 9.14

The same 9.14 is also in DAILYRESOURCEAVAILCURVE slices

	last_name	first_name	unique_name	slice_date	DAILYRESOURCEAVAILCURVE
1	Calendar	Test	cal	2013-04-01 00:00:00.000	9.142857
2	Calendar	Test	cal	2013-04-02 00:00:00.000	9.142857
3	Calendar	Test	cal	2013-04-03 00:00:00.000	9.142857
4	Calendar	Test	cal	2013-04-04 00:00:00.000	9.142857
5	Calendar	Test	cal	2013-04-05 00:00:00.000	9.142857
6	Calendar	Test	cal	2013-04-06 00:00:00.000	0.000000
7	Calendar	Test	cal	2013-04-07 00:00:00.000	0.000000
8	Calendar	Test	cal	2013-04-08 00:00:00.000	9.142857
9	Calendar	Test	cal	2013-04-09 00:00:00.000	9.142857
10	Calendar	Test	cal	2013-04-10 00:00:00.000	9.142857
11	Calendar	Test	cal	2013-04-11 00:00:00.000	9.142857
12	Calendar	Test	cal	2013-04-12 00:00:00.000	9.142857
13	Calendar	Test	cal	2013-04-13 00:00:00.000	0.000000
14	Calendar	Test	cal	2013-04-14 00:00:00.000	0.000000
15	Calendar	Test	cal	2013-04-15 00:00:00.000	9.142857

Fig A set of slice values from DAILYRESOURCEAVAILCURVE

## CONCLUSION 1

The resource availability can be changed by changing the availability on the resource properties page and by changing the length of the shifts. If you change the availability with both methods, you will create a mess.

That is likely to happen even if you have a policy, because both can be done on the without administrative rights on the application side.

If you do not have any policy for that there will always people who use one of the methods and people who use the other as both can be done on the application side.

Further if you change the shifts in the resource calendar, you will create a new resource specific calendar.

	PRUID	PRID	PRNAME	HOURS_PER_DAY	PRVALUE	PRRESOURCEID	PRBASECALENDARID
1	RNL4R_@9=,T.H9Q%>BAJUPF	9	Standard	8	0x7E2C0000063A66007B4000000000007D	NULL	NULL
2	PRCalendar5002001	5002001	Test_calendar	7	0x7E000000073A66007B3A66007B400000000000007D3E...	NULL	9
3	PRCalendar5002002	5002002	NULL	7	0x7E000000073A66007B3A66007B400000000000007D3E...	5013057	9

Fig Resource specific calendar.

A resource specific calendar in prcalendar table is identified with having no pname and a value in prresourceid field.

If you took that way you would create calendar for every single resource for whom you change the shifts.

Even if that were OK, the problem is that you would have to maintain the calendar exceptions in all of them separately and the connection to the base calendar broke when the shifts were set for the resource.

The way to establish if the resource availability matches the shifts in the base or resource calendar is to compare DAILYRESOURCEAVAILCURVE slices to the prcalendar.hours\_per\_day of the calendar with which the resource is associated.

## XOGing shifts

Adding the shift information to match the availability value to the XOG write input file allows to make the resource availability to match the shifts in the resource specific calendar. As explained above that makes them match, but adds another calendar to the system with the before mentioned problems.

There is the resetCalendar attribute, but setting that to true did not pass the shifts to the base calendar in my single test.

```
<?xml version="1.0" encoding="UTF-8"?>
<NikuDataBus xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="../xsd/nikuxog_resource.xsd">
  <Header action="write" externalSource="NIKU" objectType="resource" version="12.1.1.1208"/>
  <Resources>
    <Resource employmentType="EMPLOYEE" externalId=" "
      includeInDatamart="true" isActive="true" isExternal="false"
      managerUserName="kinnunenad" resourceId="cal"
      resourceType="LABOR" username="cal">
      <PersonalInformation displayName="Calendar, Test"
        emailAddress="jotakin" firstName="Test" lastName="Calendar"/>
      <ManagementInformation availability="6"
        openForTimeEntry="false" trackMode="None"
        userFlag1="false" userFlag2="false"/>
      <General addedBy="kinnunenad" addedDate="2013-04-04"/>
      <OBSAssocs completed="false"/>
      <SkillAssocs/>
      <Calendar baseCalendar="Test_calendar" resetCalendar="true">
      <Days>
        <Day dayOfWeek="MON" isWorkDay="true">
          <Shifts>
            <Shift finish="13:00:00" start="07:00:00"/>
          </Shifts>
        </Day>
        <Day dayOfWeek="TUE" isWorkDay="true">
          <Shifts>
            <Shift finish="13:00:00" start="07:00:00"/>
          </Shifts>
        </Day>
        <Day dayOfWeek="WED" isWorkDay="true">
```



```

    <Shifts>
      <Shift finish="13:00:00" start="07:00:00"/>
    </Shifts>
  </Day>
  <Day dayOfWeek="THU" isWorkDay="true">
    <Shifts>
      <Shift finish="13:00:00" start="07:00:00"/>
    </Shifts>
  </Day>
  <Day dayOfWeek="FRI" isWorkDay="true">
    <Shifts>
      <Shift finish="13:00:00" start="07:00:00"/>
    </Shifts>
  </Day>
</Days>
</Calendar>
</Resource>
</Resources>
</NikuDataBus>

```

## CONCLUSION 2

If want to change the resource availability en masse the simplest way is to change the shifts of the base calendar in the Admin Tool > Project management > Base Calendars. That will change the availability of all resources associated to the calendar.

Changing the resource availability in the resource properties is a lot of work if there are a large number of resources. That may also lead to a mismatch of the availability value and the length of the resource working day.

It is simple to modify the xml file for write input, but you need them for all the resources you whose availability you want to change. XOGing also takes a lot of processing.

No matter how the availability is changed the availability time slices will be recalculated for each resource whose availability is changed.

## VERSIONS

v.01 April 5, 2013 MKi the first draft

The content of these pages is presented as personal views only and not as any sort of advice or instruction.