TO INCREASE

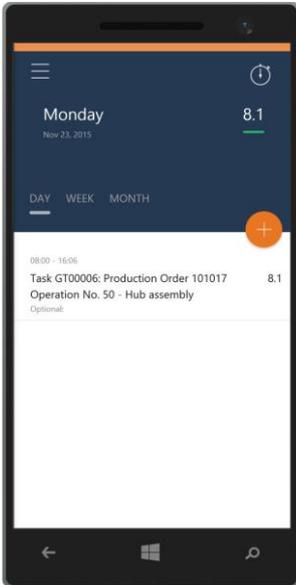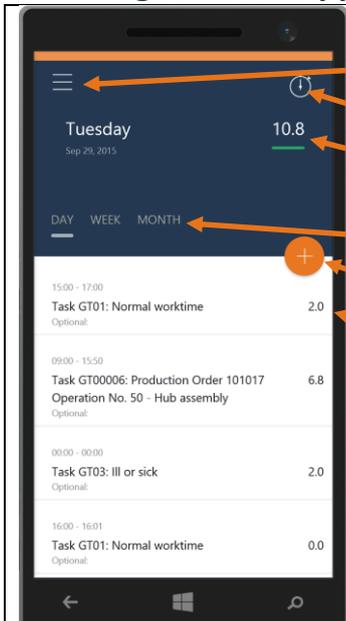# To-Increase Time Registration App

With IEM 2016 To-Increase introduces a Time Registration app. This app will be available from the main app stores: Apple, Google (Android) and Windows Phone. Its distinguishing feature is that it has been designed to work with Resource Management's Resource Tasks and has the capability to also work off-line. Synchronization between Resource Management in Dynamics NAV and the Time Registration App will take place in the background. In Resource Management time registration is synchronized with the Time Input line, processing the time input lines into the time sheets can either be done manually, to allow review before creating time sheet lines, or in batch through a Job Queue.

Resource Management setup

##	Item	Steps
0	Before you are able to register time in the app you have to complete a number of settings in Dynamics NAV Resource Management.	
1	**Resource** In NAV you are a Resource and the system will try to link your login to a Resource code. First make sure to link your user ID to a Resource code	• Type **User Setup** in the search box • Click **New** from the ribbon • On the new line select your **User ID** • In the **Resource No.** field select a Resource code
2	**Contract time** The app also knows how much time you are supposed to account for each day, this is called Contract Time and needs to be set.	• Type **Resource** in the search box • Select the resource **No.** which you just linked to the **User ID** in the list. • Click **Edit** in the ribbon to open the Resource card. • Select the **Navigate** tab in the ribbon. • Locate **Resource Contract Time** in the Planning section on this tab to open the Resource Contract Time list. • Select your **Resource** code and on the Navigate tab of the list click the **Set Contract Time** action. • Type a **Starting – and an Ending Date** to set the period for which you want to calculate the Contract Time • Select a **Work-Hour Template** Code (the default is loaded from the Resource) o Alternatively set the nr of hours per day. • The Capacity % should be 100. • Click **Add Contract Time** in the ribbon to calculate the period

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Empowering Innovation

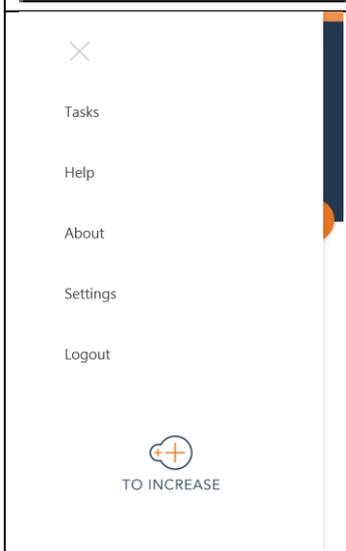|		

3	**Resource Tasks**
	The basis for time registration are the Resource Tasks which have to be created either manually by the user or from the various planning functions in:
	Jobs, Production, Service or Assembly.
		• Type **Task List** in the search box
		• The list shows all the **Resource Tasks**, the following is relevant for tasks to be synchronized from this list:
		  o A task must have the status **Active.**
		  o The **Starting Date** must be blank or before the current date and the **Ending Date** must be blank or after the current date.
		  o The task must have a **Work Type Code**
		  o The task must be assigned to you Resource code.
		• The check the above settings select a task and click **Edit** in the ribbon to open the card.

4	**Assigned Resource Tasks** The next step is to assign Resources to Resource Tasks in that way we know which Resource Tasks have to be synchronized with the app. *This means that a function like "Show All" (which also lists the Resource Tasks which are not assigned to the Resources) is not available in the Time Registration app.*	• Select a **Resource Task** from the list • Select the Navigate tab and click the **Assignments** action to open the Assignments list • Make sure your **Resource** code is listed or create a new assignment by clicking New in the ribbon.

5	**Time Input Line**
	The registration in the app will be synchronized with the Time Input Line table. From this table the completed records can be processed into a resource specific Time Sheet.
	The processing can be manually providing the opportunity to review/correct the entries before creating the Time Sheet Lines.
	Alternatively a Job Queue can be used to batch process the Time Input Lines with set intervals.
		• Type **Time Input Line Worksheet** in the search box to open the list.
		• The list shows the entries as created from the Time Registration app
		  o *Note that for demo and testing purposes the interval for the app has been set to **3 minutes** while the minimal setting from the app is **15 minutes**.*
		• The **Time Input Lines** have a status code:
		  o Open means that only a Starting Time has been received (The Timer is being used)
		  o Completed means that there is a Starting – as well as an Ending Time
		  o Registered means that
		• Select the Navigate tab and use the **Process** action to create Time Sheet Lines
		  o This action will take the lines with the status Completed to the status Registered.

Working with the app

|	
	Home screen - Menu button - Timer button, starts the timer - Time registered for this day, green indicates at least the amount of contract time has been registered. - Select Day, Week or Month view. - Add Task button, opens the task list - Registered tasks for this day You can swipe left or right in the task list to show previous and next days.
	Push the **Menu** button to open the settings list: - Tasks shows a list of your assigned tasks - Help opens a brief description of the main subjects - About shows information on the Time Registration App - Settings brings up the settings page, (see below) - Logout exits the app Push the X in the top of the menu or the To-Increase logo to return to the home screen.
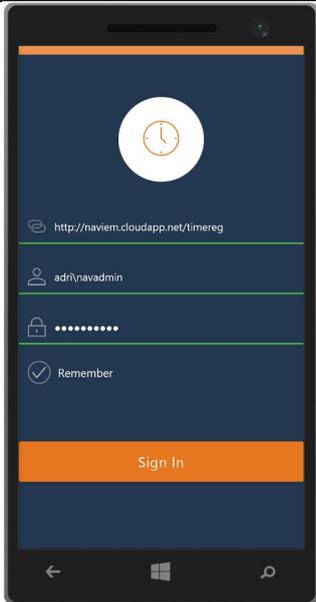
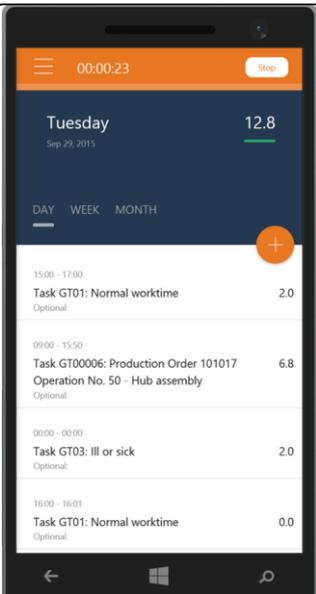|	**Settings**
	Use this page to connect the Time Registration app with Dynamics NAV
	The **URL** should be provided by your system administrator
	The **login** name is the one which links you to a Dynamics NAV resource
	Type your **password**
	Check the **Remember** option if you want to stay connected
	*Once the above fields are completed push the **Sign In** bar. The app will make a connection, verify you credentials and perform a first synchronization.*
	Timer
	Take these steps to use the timer:
	1. Push the **Timer** button
	2. **Select** a Task from the Task list
	3. The Timer will run at the top of the screen, when done push the **Stop** button in the timer bar.
	4. The timer will stop and allow you to either **Save** the registered time entries (From … To) or to **Resume** the timer
	5. Save will return to the Home screen showing the task for which the time was recorded.

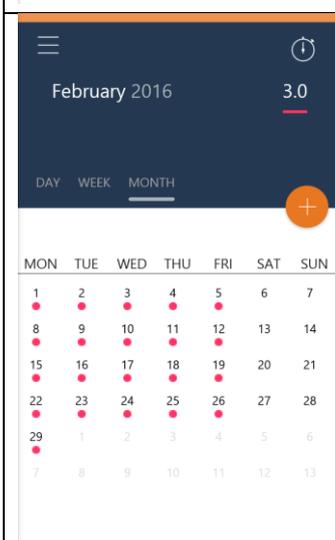|	
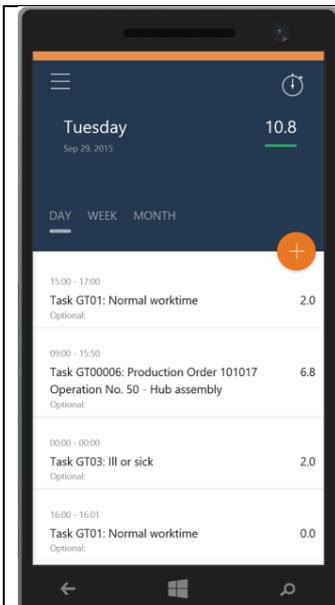
	Add Task
	
	Take these steps to register time on a Task
	
	1. Push the + button
	2. Select a Task from the Add item list
	3. In the "Set timespan and add note" page complete the time registration in one of the following ways:
	   a. **All day** – move the slider button to the right
	   b. Tap the **From** time to type a starting time and next tap the **To** time to type an ending time, the app will calculate the Duration.
	   c. Tap **Duration** to type the total time worked on the task
	4. Push **Create** to save the task
	
	Use the ← in the upper left corner to navigate back
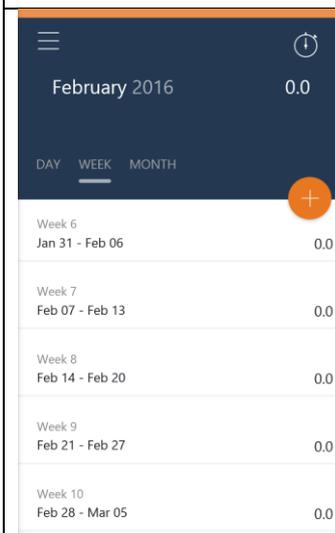
	Week view The week view lists the time sheets per month per week with a "brick" for each week showing the time registered for that week. Tap a week to open the Day view on the first day of that week. You can swipe left or right in the week list to show previous and next weeks. *The time shown in this view is from the time sheets, in other words processed from the time input lines.*
	Month view The month view shows a calendar of the month with a color indicator to showthe amount of time recorded per day. Red means less than the contract time. You can swipe left or right in the calendar list to show previous and next months.

Time Registration App Web site Installation

1. Run the installer to create the web site

    To-Increase Mobile Client API Installer.exe

2. Make sure the SOAP services are enabled in the Dynamics NAV 2016 Administration console

SOAP Services			
Enable SOAP Services:	☑	Port:	7047
Enable SSL:	☐	SOAP Base URL:	
Max Message Size:	1024		

3. Verify if the web services are enabled in Dynamics NAV

    a. In the Windows Client type **Web Services** in the Search box and click to open

    ../Departments/Administration/IT Administration/Services/Web Services

    b. Verify that the following object is exposed as web service:
        i. Object type   **Codeunit**
        ii. Object ID   **11027785**
        iii. Service Name   **ResourcePortalMobileService**
        iv. Published   **True**
        v. OData URL   **Not applicable**
        vi. SOAP URL   **…/Codeunit/ResourcePortalMobileService**

    Note that for IEM 2015 you have to be on build 3780 to find this object.

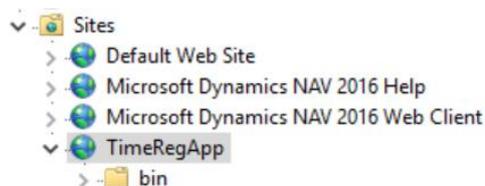   Besides this Codeunit the following NAV objects are involved.

| Type	ID	Name	Version List
1	11027779	N018 Time Input Line	NAVIEMW17.10
5	11027785	N018 Time Reg. Mobile Service	NAVIEMW18.00
9	11027785	N018 Time Reg. Task Assignment	NAVIEMW18.00
9	11027786	N018 Time Reg. Time InputLines	NAVIEMW18.00
9	11027787	N018 Res. Contract Time	NAVIEMW18.00

4. Copy the full SOAP URL

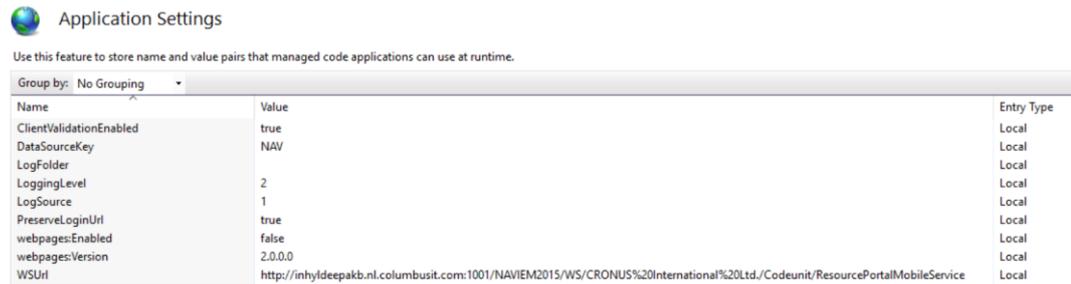5. Open the Internet Information Service (IIS) Manager

    a. Locate the Time Registration App web site

    b. In the ASP.NET section locate Application Settings
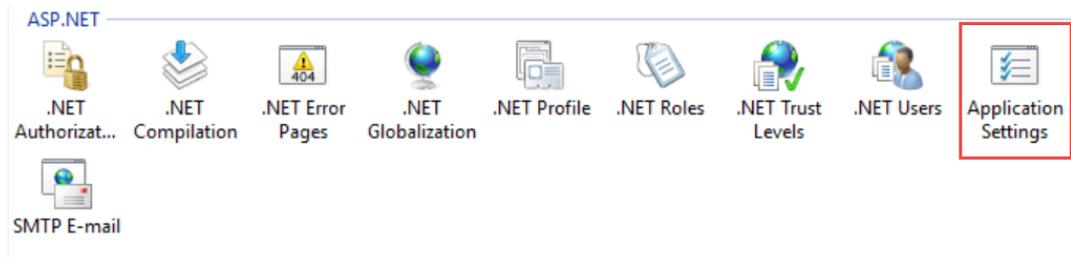
c. In the ASP.NET section locate Application Settings, double click to open

6. Paste the SOAP URL to the Application settings in the WSUrl