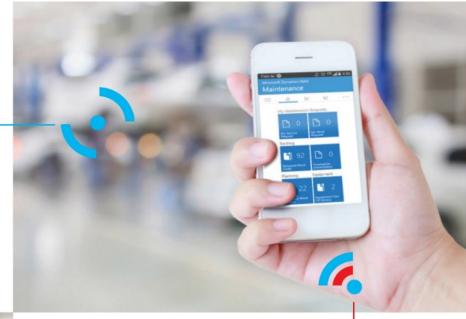Integration

Control

Mobility

Simplicity

Solution Whitepaper,

Setup and User Guide

TAG365 Software

A Maintenance Solution

(CMMS)

Tag

The Asset Guardian

Contents

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1. About TAG365 and The Asset Guardian

a. Solution Description

TAG365 was developed based on the Microsoft Dynamics 365 Business Central platform using Extensions as a means to provide our maintenance solution as an application connected to Microsoft Office 365.

TAG365 has the same base functionality as TAG (The Asset Guardian) which is a Certified Microsoft Dynamics ISV solution.

TAG365 is a maintenance solution (CMMS) for companies with assets that require the following actions as part of their life cycle:
- Requests for maintenance and request management
- Unscheduled repairs that you want to record,
- Inspection or calibration work,
- Unpredictable events, such as breakdown repairs,

TAG365 allows you to predefine the following to plan the maintenance:
- Specific technicians with suggested skills and qualifications,
- Required parts
- Required tools,
- Other charges (Hotel & transportation),
- Outside service providers (OSP)

TAG365 allows for request management, always records the results and keeps accurate statistics on your assets.

Responses to the required maintenance actions may be efficiently handled through predefined procedures or manual interventions.

In addition, electronic documents and materials may all be attached to a work order.

TAG365 lets you define the rules for how a defined task or event should be handled and what ancillary materials are required as a work procedure, which may then be applied to a work work order as part of a template, or as an individual task line in the work order..

TAG365 helps you manage and create maintenance work orders resulting from requests, planning purposes or need. To help you manage your work load, TAG provides interactive views of your work load by personnel, equipment or tasks. You can even view your Requests and their current status. The dynamic change feature utilized by all these views empowers you with maximum flexibility to make changes to your work orders and/or technician assignments to meet your demands.

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b. Version

Microsoft Dynamics 365 Business Central
TAG9.00.04.15.03r

The Asset Guardian is maintained for current customers, it is the original version of the TAG product and is now released in multiple solutions.
TAG365 is built on extensions and is managed by Tag Plan. The user has limited access to the Base TAG functionality as downloaded with the application. New customers for TAG365 will work with the Tag functionality made available by TAG plan through extensions that were developed from the 70 million object range as assigned by Microsoft. Tag plan allows limited access by the user to TAG modules as licensed on the supporting Dynamics 365 Business Central database. The intent is to makes the product and implementation price point more flexible, in accordance with Microsoft Dynamics 365 Business Central's offers and product structure.

c. Localization and Languages
North America, English (United States)

Reference documents:

There are two documents used for TAG365 to describe install, configuration, functional description, data setup and scenario guide:
Installation and Configuration Guide: TAG Dynamics 365 Business Central Installation and configuration guide.
Solution Whitepaper, User Guide and Key Usage Scenarios document TAG365 Software: TAG Dynamics 365 Business Central Setup User Guide document.

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2. User Profiles

Business Manager Profile is the unique profile used in this document,it can be used as the starting profile for all maintenance user roles: manager,maintenance planner,maintenance technician or maintenance requester.

a. User Role for a Maintenance Manager

User profile	role ID	description	transactions
Maintenance Manager	9022	The Manager will verify the maintenance practices and give orientation to his staff. Can also execute the daily planning activities in the maintenance department. execute the maintenance work, report activities done and material used Optionnaly,A Manager will initiate service or work requests on the maintenance department based on observation.	**A Maintenance Manager will**: • Access the Equipment Overview • Access the Whiteboards and verify the work load by personnel, equipment or tasks, • Access all types of work orders to monitor who does what and when, • Monitor requests for maintenance, set priorities and convert work requests or service requests into work orders, • Create work orders manually or by copying another work order or by releasing a Planned Work Order, • Classify the work, set priorities, schedule the Technicians and load level the maintenance department. • Control the maintenance work executed by the Technician, • Maintain or create TAG records like Equipment, Work Procedure, emplate, etc. • Access the personnel whiteboard, drill down to a released work order, print the work order packet, print a pick list • Optionaly, create a Consumption Order to consume some of the spare parts ,enter feedback, report the time spent during the day and close work order lines with time. • Optionaly ,The manager can create service or work requests, • Lookup own requests, use the tracking tool to follow up the progression of own requests.

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3. Primary Functions

Primary Functions for a Maintenance Manager

List of the primary functions for a Maintenance Manager, Role ID 9022:
Primary function for the Maintenance Manager:
Access the equipment overview or equipment list to:
- Control which equipment is maintained,
- Extract information and statistics about equipment by element.

Where in TAG	What Information

Maintenance Equipment> Equipment Overview> Navigate> Equipment Card… **Reference** FastTab	Information **by Element** or **by Hierarchy**… Information **for W/O Header** or **for W/O Lines**…
	• **Requests count** per Equipment (Open & Finished Requests)
	• **Planned W/O count**
	• **Released W/O count**
	• **Finished W/O count**
	    o (**Print the FWO** from the Header count)
	    o **Dynamics 365 Business Central Navigate** functionality through the FWO Card
	* The information is displayed in **statistical format**.
	** The "**count**" fields are **drillable** and allow to view **Lists** and **Cards**.
	*** Through the Finished W/O count, it is possible to **Print the FWO**
	**** **Filters** can be used on the Lists.

Maintenance Equipment>Equipment Overview>Equipment Card… Top toolbar… **Planned W/O List** button, **Released W/O List** button, **Finished W/O List** button.	**List** of all the different **Work Orders** (W/O) for this Equipment. * Each W/O can be either **viewed** or **edited**. ** The **Tracking** information is available *** **Filters** can be used on the Lists.
Maintenance Equipment>Equipment Overview>Equipment Card… Top toolbar… **Equipment List** button	**List** of all the **Equipment IDs** in TAG. * **New**, **Edit**, **Delete** functionalities are available, ** The **Analyze** functionality is available, *** The **Transfer History** functionality is available, **** **Filters** can be used on the Lists.
Maintenance Equipment>Equipment Overview>Equipment Card… Top toolbar… **Overview** button	**Overview** of all the **Equipment IDs** in TAG. * Same Page as the **Main Equipment Overview**, ** The **cursor** is already positioned on the Equipment ID, *** **Filters** can be used on the Overview Page.

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-or through- The Main Equipment Overview Page	
Maintenance Equipment>Equipment Overview>Equipment Card… Top toolbar… **Comments** button	**List** of all the **Comments** for this Equipment. * **New**, **Edit**, **Delete** functionalities are available, ** Tick box to **Print** the Comments on the W/O Packet, *** Possibility to set a "**Print Period**" by Comment, **** Possibility to "**Print by Technician**" for each Comment.
Maintenance Equipment>Equipment Overview>Equipment Card… Top toolbar… **Entries** button (TAG Ledger) • **Personnel**, • **Inventory**, • **Tool**, • **OSP**, • **Other**.	**List** of all the **TAG Ledger Entries** by Finished W/O. The **Dynamics 365 Navigate** functionality is available on all the TAG Ledgers. * The majority of the fields on the List are **drillable**, ** Possibility to **Print a Ledger Entries Report**, *** **Filters** can be used on the Lists.
Maintenance Equipment>Equipment Overview>Equipment Card… Top toolbar… **Statistics** button.	Information on Equipment by **Element**: • **First** & **Last** Finished W/O, • **Lifetime statistics** on Finished W/O, • The **Active Work**: o **Open W/O** o **Existing DMPs** o **Agreements** • The **Current Year**: o **Count** of **Preventative** vs **Reactive** W/O, o **Budget** and **Actual** statistics, o All TAG **Ledgers statistics**. • The **Prior Year**: o **Count** of **Preventative** vs **Reactive** W/O. o **Budget** and **Actual** statistics. o **All TAG Ledgers statistics**. The Statistics Page also gives access to: • Equipment **Analysis Page** and **Hierarchy Analysis Page**: o Lines closed **by Operator** vs **by System**. o Work Order count **with** or **without** Work Code. The **Info** Icon under "**Work Codes**" gives access to: • **Work Code Analysis List**:

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	The **"Count" drill down field** gives access to: • **Finished W/O Line Details List (By Work Code)**. * The majority of the fields on the Finished W/O List are drillable. ** The Finished W/O Card is available and gives access to the **Dynamics 365 Business Central Navigate** functionality.

Equipment Card…
Top toolbar…
Analyze button.
	Equipment **Analysis Page** (only the Element…not the Hierarchy) :
	• Lines closed **by Operator** vs **by System**.
	• Work Order count **with** or **without** Work Code.
	
	The **Info** Icon under "**Work Codes**" gives access to:
	   o **Work Code Analysis List**:
	
	The **"Count" drill down field** gives access to:
	   ▪ **Finished W/O Line Details List (By Work Code)**.
	* The majority of the fields on the Finished W/O List are drillable.
	** The Finished W/O Card is available and gives access to the **Dynamics 365 Navigate** functionality.

Equipment Card… Top toolbar… **Work History** button… • **Header Work History** • **Line Work History**	**Header Work History**: (When the Equipment ID appears on the **Header** of the Finished W/O): • **List of Finished W/O where the Equipment ID appears on the Header**. * The majority of the fields on the Finished W/O List are drillable. ** The Finished W/O Card is available and gives access to the **Dynamics 365 Business Central Navigate** functionality. **Line Work History**: (When the Equipment ID appears on the **Line** of the Finished W/O): • **List of Finished W/O where the Equipment ID appears on the Line**. * The majority of the fields on the Finished W/O List are drillable. ** The Finished W/O Card is available and gives access to the **Dynamics 365 Navigate** functionality.

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Equipment Card… Top toolbar… **Attachments** button.	**List of Attachments** for this Equipment. Any kind of Attachments may be associated with the Equipment Card or Sub-Assembly Card: • Word, Excel, Power Point, Visio, MS Project documents, • PDF • Jpg • Notepad, • Etc…
Equipment Card… Top toolbar… **Feedback** button.	**List of Feedback** for this Equipment. * Different **Feedback Types** are created (only from Work Orders): • General • As Found (Equipment) • Repairs • As Left (Equipment) • Recommendations ** The "**Document No.**" in the List of Feedback is a drillable field and allows to access the Finished W/O Card that was used to generate the Feedback.
Equipment Card… Top toolbar… **Parts** button.	**List of Spare Parts** for this Equipment. * Spare Parts can be created from: • Existing "**Items**" • Existing "**Consumables**" ** New, View, Delete functionalities

Primary function for the Maintenance Manager:
Access the whiteboards to verify the work load:
- Equipment Whiteboard,
- Personnel Whiteboard,
- Task Whiteboards.

All whiteboards allow the user to select filter options which may change the content shown.
In addition, users may perform many other functions while viewing the whiteboards.

Where in TAG	What Information
Maintenance Tasks>Released Work order> Equipment Whiteboard…	The **Equipment Whiteboard** shows Work Orders by Equipment. The purpose of the Equipment Whiteboard is to provide a real-time view of your Equipment by date of Planned or Released Work Orders. Standing and Pending Approval Orders are not shown on this

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	Whiteboard.
	The Equipment Whiteboard is an active and visual work management tool divided into four (4) segments:
	• General FastTab showing filters to control the information used to populate the Whiteboard FastTab. These filters allow the user to control what and how the Equipment is shown in the <u>Description column</u>.
	<u>The filters are divided into four (4) groups:</u>
	    o Equipment (Level 1 or All levels)
	    o Duty Status (Active, Idle, Down, All)
	    o Work Orders (Released or Planned)
	    o Locations (Region, Facility, Area, Line)
	• Whiteboard FastTab showing Work Orders spread on a calendar and sorted by Equipment.
	• Details FastTab displaying a list of the Work Order(s) selected in the calendar for a given day.
	• Last segment showing some Work Order key fields for the Work Order selected in the Details FastTab.

Maintenance Tasks>Released Work order>
Personnel Whiteboard…
	The **Personnel Whiteboard** shows Work Orders by Personnel.
	The purpose of the Personnel Whiteboard is to provide a real-time view by person, by Outside Service Provider and by time of Planned or Released Orders.
	<u>Standing and Pending Approval Orders</u> are not shown on this Whiteboard.
	The Equipment Whiteboard is an active and visual work management tool divided into four (4) segments:
	• General FastTab showing filters to control the information used to populate the Whiteboard FastTab. These filters allow the user to control what and how the Equipment is shown in the <u>Description column</u>.
	<u>The filters are divided into three (3) groups:</u>
	    o Work Orders (Released or Planned)
	    o Locations (Region, Facility, Area, Line)
	    o Include Personnel Without (Region, Facility)
	• Whiteboard FastTab showing Work Orders spread on a calendar and sorted by Personnel.
	• Details FastTab displaying a list of the Work Order(s) selected in the calendar for a given day.
	• Last segment showing some Work Order key fields for the Work Order selected in the Details FastTab.

Maintenance Tasks>Released Work	The **Task Whiteboard** shows the Work Order Steps and provides personnel utilization percentages.

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order> Task Whiteboard…	The purpose of the Task Whiteboard is to provide a real-time view by person, by Outside Service Provider and by time of Planned or Released Orders.
	When the Task option is selected you must **choose the Date** by which the data on the Whiteboard will be organized. In addition, this Whiteboard utilizes the Steps on the Work Orders.
	<u>Standing and Pending Approval Orders</u> are not shown on this Whiteboard.
	The Equipment Whiteboard is an active and visual work management tool divided into four (4) segments:
	- General FastTab showing filters to control the information used to populate the Whiteboard FastTab. These filters allow the user to control what and how the Equipment is shown in the <u>Description column</u>. <u>The filters are divided into three (4) groups:</u> - Work Orders (Released or Planned) - Locations (Region, Facility, Area, Line) - Include Personnel Without (Region, Facility) - Steps Included (Open, Finished, All) - Whiteboard FastTab showing Work Orders spread on a calendar and sorted by Personnel. - Details FastTab displaying a list of the Work Order(s) selected in the calendar for a given day. - Last segment showing some Work Order key fields for the Work Order selected in the Details FastTab.

Primary function for the Maintenance Manager:
- Create work orders manually or,
- Copy another work order or,
- Release a Planned Work Order.

Where in TAG	What Information
Maintenance Tasks>Released Work order…	To **create** a new Released Work Order: From the Released Work Order list, in the Maintenance Tasks section, click on the New button, the Work Order card will be displayed. Tab over the No. field (or click on the Description field) to let TAG assign automatically a No. Enter a Description, assign an Equipment, assign a Technician and fill the desired fields. In the Lines FastTab, use the pull down on the Steps field to assign a Work Procedure or enter a Description. TAG will copy the Technician code from the Header to the Line.
Maintenance Tasks>Released Work	To **copy** another work order:

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order…	From the Released Work Order list, in the Maintenance Tasks section, click on the New button, the Work Order card will be displayed. Tab over the No. field (or click on the Description field) to let TAG assign automatically a No. In the Action tab, click on the Copy Order button, TAG will ask you what kind of order to copy from and will give you some options, click on the OK button to create a new Released Work Order. Edit the Description and other desired fields on this new Work Order.
Maintenance Tasks> Planned Work order…	To **release** a Planned Work Order: From the Planned Work Order list, select a Planned Work Order to be released, in the Maintenance Tasks section, click on the Edit button, the Work Order card will be displayed. In the Action tab, click on the Release Order button. TAG will ask you if you are sure about this action and if you want to refresh the dates to today's dates, a message is displayed that the planned Work Order has been released. Refresh the priority and the status of the new Released Work Order. If desired, you could also edit other fields.

Primary function for Maintenance Manager:
- Access the Personnel Whiteboard, drill down to a Released Work Order,
- Print the Work Order Packet, Print a Pick List,

Where in TAG	What Information
Maintenance Tasks Section…	From the Whiteboard by Personnel FastTab, in the calendar section, on a given day, drill down on the information (WO/Time), In the Whiteboard Details FastTab, drill down on the No. field to open the work order card. From the Released Work Order card, in the Navigate FastTab, click on the **Work Order Packet** button, select the desired filters and click on the Print Button. Click on the **Picking List** button and follow the same procedure. Walk to the store to pick the spare parts.

Primary function for Maintenance Manager :

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- Create a Consumption Order to consume some of the spare parts, enter Feedback,
- Report the time spent during the day.
- Close the Lines with Time.

Where in TAG	What Information
Maintenance Tasks Section…	From the Released Work order card, in the Navigate tab, click on the Consumption button, set the Actual Quantity field and click on the Consume button. TAG will ask you if it is OK to post the Consumption Order and to set the Actual Quantity to zero on the original work order. Click the Yes button. In the Navigate tab, click on the Feedback button and key in the desired feedback type. In the Line FastTab, enter the number of hours spent on this work order in the Actual Time field. In the Navigate tab, click on the Close Line W/Time button.

Primary function for Maintenance Manager :
- Create a Work Request or a Guided Request.

Where in TAG	What Information
Maintenance Tasks Section… (Similar procedure for the Guided Request)…	From the Work Request page, key in mandatory and optional fields (as per the TAG setup). In the Action tab, click on the Additional Description button and key in text. In the Action tab, click on the Create button to create a Work Request.

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4. Contributing Functions

a. Contributing Functions for a Maintenance Manager

Contributing Function	Definition
Equipment Transfer	TAG supports Equipment or a sub-assembly moves from any level to any other level. With the Transfer functionality, it is possible to list the transfers for equipment. The list of transfers can be filtered by numerous different pertinent fields.
Management of the Security by User	TAG allows to assign Users to Regions, Facilities and Enterprise. When Security is active in Setup>Controls>Security FastTab (Security On field is ticked), then, the Users will see only the information related to the Regions, Facilities and Enterprise they are assigned to. Additionally, Users can be authorized or restricted on the following functionalities: 1. Allow Capital Expenditures 2. Allow Standing Orders 3. Allow Create WO from Request 4. Allow Equipment Change & line delete on RWO 5. Allow FO Feedback Change 6. Allow Equipment Move 7. Allow Work Order Deletion 8. Consumption Order Approval Required 9. Require Approval on Complete

Contributing Function	Definition
Checkout & Returns functionality	For Users that wish to have a tight control on spare parts, TAG proposes a functionality that allows a stock keeper to "Checkout" material to a Technician or to a Released Work Order. When the Work Order is completed, the material not used must be returned. It is possible to control the checkouts, returns and usage in the "Inventory Checkout" report (Departments>Maintenance>Inventory>Reports and Analysis> Inventory Checkout)

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Approval Required	TAG offers the possibility to post a Maintenance Work Order when the Technician click on the "Complete" functionality of a Released Work Order. But if management desires to control the Technician's input on a Released Work Order, it is possible to have an extra step and send the Completed Work Orders in a section called "Pending Approval Work Orders". Then, the Maintenance Planner or the Maintenance Manager would verify the Work Orders and post them from this section. (Departments>Maintenance>Work Orders> Pending Approval Work Orders).

Contributing Function	Definition
Equipment Select/Unselect, Move	TAG supports Equipment or a sub-assembly **moves** from any level to any other level. From the Navigate tab: 1. Click on the equipment or sub-assembly to move, 2. Click on the Select/Unselect button, 3. Position the cursor where you want to move the equipment or sub-assembly, 4. Click on the Move button, 5. Answer the questions on the popup window (After/Under and Reason for the transfer), 6. Click OK
Copy User Personalization Departments>Maintenance>Periodic Activities> Copy User Personalization	This functionality allows a Super User to copy his personalization to other TAG Users after an optimization of the TAG Pages. It applies the personalization only to the TAG pages and does not modify anything for the **Dynamics 365 Business Central** pages.
Copy Equipment Data Departments>Maintenance>Equipment> Lists>Equipment overview… Open an Equipment card, Navigate tab, Copy Equipment Data button…	This functionality allows a TAG User to create a new equipment by copying all the information from another equipment that has the same structure. It creates the following elements copied from the model equipment: 1. A new level 1 equipment code, 2. New sub-assembly codes matching the model, 3. Attachments,

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	4. Comments,
	5. Service Agreements,
	Parts (Items and consumables)
Import Meter Data	TAG accommodates bulk meter reading by Equipment.
	The procedure includes compiling all the meter readings in
Departments>Maintenance>Equipment>	an Excel worksheet and use the Import Meter Data
Import Meter Data…	functionality
Records Import tool	Tag offers tools to import data:
	1. Equipment Groups
Departments>Maintenance>Periodic	2. Consumables
Activities> Imports>	3. Equipment
	4. XYZ Coordinates

Contributing Function	Definition
Manage Consumption Order Change (MCOC) Departments>Maintenance>Setup> Facility… Open a Facility card, Validity FastTab, Manage Consumption Order Change…	This functionality replicates the changes done in a Consumption Order back to the originating Released Work Order. When the "**Manage Consumption Order Change**" Option is Active (MCOC): • Data elements (Particularly Related Requirements) on a Consumption Order will affect the originating Released Work Order only upon Posting of the Consumption Order. • Until Posting of the Consumption Order, there may be differences in the data content on the Consumption Order and the originating Released Work Order. • Any other data element(s) on the Consumption Order may be changed by an authorized user. However, any such change(s) will not be reflected on the originating Released Work Order. Also, during the creation of any Released Work Order, if Related Requirements are attached to the Header or to the Lines, by default, the "**Substitution Allowed**" field is activated but is also editable.

Contributing Function	Definition
Copy Equipment Data Maintenance Equipment>Equipment> Lists>Equipment overview…	This functionality allows a TAG User to create a new equipment by copying all the information from another equipment that has the same structure.

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Open an Equipment card, Navigate tab, Copy Equipment Data button…	It creates the following elements copied from the model equipment: 6. A new level 1 equipment code, 7. Attachments, 8. Comments, Parts (Items and consumables)

Contributing Function	Definition

Service and Work Request defaults setup
 	
Departments>Maintenance>Setup>
Controls…
Request FastTab…
	To accommodate the Requester Users, TAG allows to setup many defaults that will be applied to the Service and to the Work Request pages:
	1. Default Maintenance Type
	2. Default Work Request Priority
	3. Default Work Request Status
	4. When the Request is used to build a Work Order, the Additional Description can be converted into :
	    a. Feedback on the Work Order
	    b. Comments on the Work Order
	    c. Lines on the Work Order
	The following fields may be required or optional:
	1. The Request Description
	2. Maintenance Type
	3. Equipment ID
	4. Requester name

5.   Potential Instabilities and Challenging Data

a.   **Whiteboard "Period Start"**
Specific setup for the Whiteboard "Period Start" vs an old Released Work Order may cause misunderstanding:

The Whiteboards are using the oldest Released Work Order dates to start displaying their calendar.
As an example, if we are in July 2015 but one old Released Work Order is still in TAG dated in January 2015, then TAG will start displaying the calendar starting in January 2015 even if the majority of the Released Work Orders are in July 2015.

So if the Whiteboard "Period Start" is set to 10D as an example, the Whiteboard will start showing a calendar that does not display the oldest Work Order. A setup of -1D would.

In such a case (10D), a User may observe that the Whiteboard calendar always starts by displaying old dates without showing Work Orders while the majority of the Work Orders are displayed in a recent part of the calendar.

b.   **Large amount of Equipment and sub-assembly records**
A very large amount of Equipment and sub-assembly records will slow the process down when an Equipment is selected.
Even more if in Controls, the "Equipment List Option" is set to "Overview" instead of "List".

c.   **Released Work Order Overview list refresh**
If a Released Work Order is deleted, it is necessary to get out of the Released Work Order Overview and go back in it to see the deletion. This application behavior comes from the use of a temporary Table to accommodate the Split Work Order functionality.

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6. Consistency Validation Test:

Assumptions:
- This section assumes that the 'Test User' has a base functional knowledge and familiarity with Standard Microsoft **Dynamics 365**. As such the 'Test Procedure(s)' in this section focus only on how to use and test the solution noted. Where the solution deviates from Standard Microsoft **Dynamics 365** functionality will be highlighted.
- The 'Test user' will read and perform tests in this section in the order presented.

Prerequisites:
Complete tasks in 'Tag365 Setup and Configuration guide' before proceeding.
Review the prior sections before proceeding.

Required information:

Testing Notes:
- Note that primary function test scenarios are listed in a logical order for the test user to build test data that may then be used in later testing. The reference "Profile Role" and 'Primary Function' will be detailed. Primary functions may be used in multiple Profile roles, but each test scenario will only be detailed once for document clarity and brevity.

- Each Primary Function will be described as in the following order:

  o Tag profile description
     ▪ Primary Function name
        o Step by Step procedure

     Sample screenshot of result for Primary Function.
- The User may change TAG profiles as desired, however, all primary functions may be performed for the test procedure from the profile: TAGMaintMgr. The other profiles are available and directions on how to change are included: 1) TAGMAINTMGR, 2) TAGREQUESTER, 3) TAGPLANNER, 4) TAGMAINTTECH

Test Procedure for Primary Functions:
1. Log into TAG365 under profile 'Maintenance Manager'
   a. TAG Maintenance Manager, Role ID 70016130

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Perform primary function tests:

Create New equipment:

- Start from Tag **Business Manager** profile
- Go to the **Equipment Setup** Section and click on the **Equipment Overview**
- Click on the Button **New** on the Ribbun.
- Open the **General Fast** tab.
  1. Tab over the **No**. field (or click on the **Description** field) to let TAG assign automatically a **No**.
  2. Enter the equipment **Description,Facility,Region and Equipment Group** fields.
- Open The Source Fast Tab.
  1. Enter **Purchase Cost, Date of Purchase ,Model Number ,Serial Number, Instal Date** fields.
  2. Select **ok** to close page.

Note:

If desired Region,Facility or Equipement Group dosen't exist,you can create them from equipment card :
Here example how to create Equipment Group if dosen't exist :
  1. Click on the three dot button for equipment group field.
  2. Click on New button on the open list

3. Enter the Code,Description fields :

Result:
Equipment Card: access to the equipment card.

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General and Source Fast Tab Equipment Card :

Follow the steps above to create this list of Equipments :

ID	Description	Facility	Region	Adress	Equip Group	Duty Type	Date Of Purchase	Purchase Cost	Equip Seriel Numb	Install Date
EQ100001	ForkLift Toyota	Fac001	USA	285,Ed,USA	ForkLift	Continuous	06/20/17	25000	SN147	06/20/17
EQ100002	Cat Excavator	Fac001	USA	285,Ed,USA	ForkLift	Continuous	06/15/17	8000	SN148	06/15/17
EQ100003	Komatsu Loader	Fac001	USA	285,Ed,USA	ForkLift	Continuous	06/20/17	10000	SN149	06/20/17

Create Work Procedure:
- Start from Tag **Business Manager** profile
- Go to the **Maintenance Setup** Section and click on the **Work Procedue** menu.
- Click on the **New** Button under the Ribbon.
- Open the **General fast** tab on the **Work Procedure card**:

    1. Tab over the **No**. field (or click on the **Description** field) to let TAG assign automatically a **No**.
    2. Enter the **Description, Standard time** and others desired fields.
- Click on Navigate Tab and then on **Related Requirement** button to enter Work Procedure Related Requirement .
    - o On the open Page,click on the type column and select item.
    - o Click on the No field to select one item
    - o Click on the Expected Quantity column to enter the expected quantity for this item.
    - o If Expected Unit Cost is not there,you should enter Expected Unit Cost for this item.
    - o Click on the next line and select consumable as type.
    - o Click on the No field to select one Consumable.
    - o Click on the Expected Quantity column to enter the expected quantity for this Consumable.
    - o If Expected Unit Cost is not there,you should enter Expected Unit Cost for this consumable
- Click on Navigate Tab and then on **Attachments** to enter Work Procedure attachment(Picture,file documentation….)
    - o On the open Page, click "Is URL" field if it's a link .
    - o Click on the "Filename" three dot button field to select the location file.
- Click on Navigate Tab and then on **Comment** to enter a specific Work Procedure instruction (to help a technician to perform this task…)
    - o On the open Page,click on the Date Column to enter the date of comment.
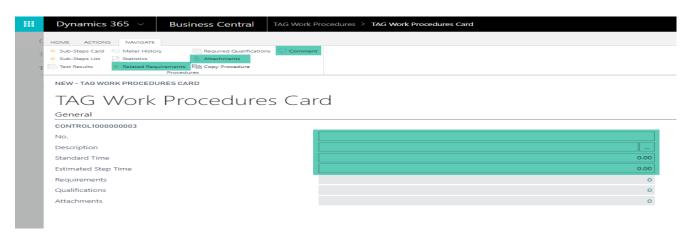   - o Click on the Description Column to enter the comment Desciption.

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Result:

Access to the Work Procedure card :

Work Procedure General fast tab :

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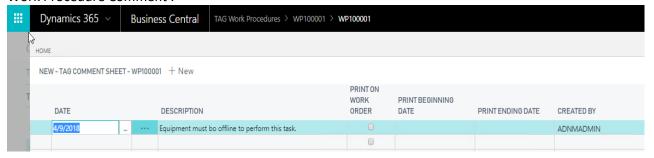
Work Procedure Related Requirement :

Work Procedure Comment :

Create two or three work procedures:

ID	Description	Standard time	Estimated step time	Work Code
WP100001	General Inspection	2	2	INSPECTION
WP100002	Oil and Oil Filter change	3	3	REACTIVE
WP100003	Battery & Engine Cranking System Check	4	4	PREVENTATIVE

Work Procedure Related Requirement :

ID	Type	No	Description	Expected Quantity	Expected Unit Cost
WP100001	Item	1896-S	ATHENS Desk	1	20
WP100001	Consumable	CONS100001	Oil	1	15

Work Procedure Comments :

ID	Date	Description	Print On Work Order
WP100001	06/19/2017	Equipment should be of to perform this task	1

Create Personnel of maintenance:

- Start from Tag **Business Manager** profile
- Go to the **Maintenance Setup** Section and click on the **Personnel** menu.
- Click on the **New** button on the Ribbon.

- Tab over the **No**. field (or click on the **Name** field) to let TAG assign automatically a **No** or enter it manually (depending on your **Setup**).
- Enter the **Personnel type, Personnel Data** (**Title**, **address**, **city**…)
- Enter the **Cost information** (**Unit of measure, annual cost, Per Hour Cost Override**).
- Click **ok** to close the page.

Steps:

Access to the Personnel Card :

Create a New Personnel :

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Create Outside Service Provider (OSP) :

- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Labour** Section and click on the **Outside Service Providers** menu.
- Click on the **New** button on the ribbon.
- Tab over the **No**. field (or click on the **Name** field) to let TAG assign automatically a **No** or enter it manually (depending on your **Setup**).
- Enter **Address,City,Type** and other desired fields.
- In the **Cost fast** tab, enter the **Charge Type, Hourly Rate** fields.
- Click **Ok** to close the page.

Steps:

Access to the OSP Card :

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Create a Consumable :

- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Inventory** Section and click on the **Consumable List** menu.
- Click on the **New** button on the ribbon.
- Tab over the **No**. field (or click on the **Description** field) to let TAG assign automatically a **No** or enter it manually (depending on your Setup).
- Enter the **Cost information**.
- Enter others information that can be useful for this consumable.
- Click **Ok** to close the page.

Steps:

Access to the Consumable Card :

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HOME   NAVIGATE

Edit   New   Delete   Statistics

Manage   Process

NEW – TAG CONSUMABLE CARD – CON100001 · OIL

CON100001 · Oil

General

No.	CON100001
Description	Oil
Navision Qty On Hand	0.00
Qty on Planned Orders	0.00
Qty on Released Orders	0.00

Cost

Get Navision Cost	☐
Purchase Cost	25.00
Overhead Multiplier	1.20
Calculated Cost	30.00
Cost When Consumed	30.00

Primary Function : Create an Item

- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Inventory** Section and click on the Items menu.
- Click on the **New** button on the ribbon.
- On the **Item fast** tab,Tab over the **Code**. field (or click on the **Description** field) to let TAG assign automatically a Code or enter it manually (depending on your Setup).
- Enter the **Base Unit of Measure**, **Item Category** fields.
- On the **Price & Posting** fast tab, enter **Unit Price** and **Unit Cost** fields.
- Enter others information that can be useful for this **item**.
- Click **Ok** to close the page.

Steps :

Access to the item Card :

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Create a New Item :

EDIT – ITEM CARD

1896-S · ATHENS Desk

Item

Description	ATHENS Desk
Blocked	☐
Type	Inventory ▼

Costs & Posting

COST DETAILS

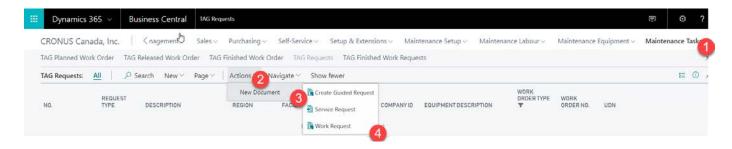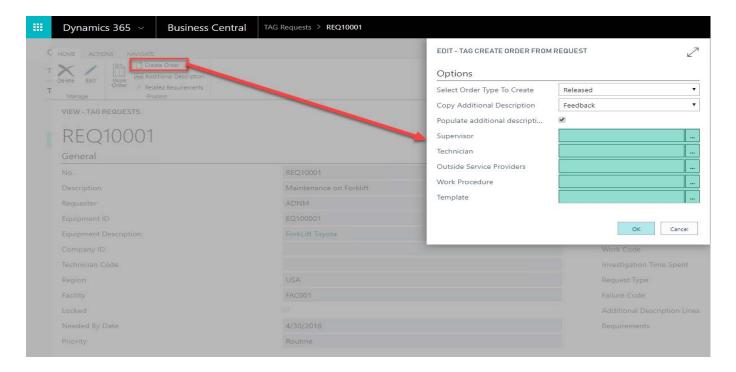|	
Costing Method	FIFO ▼
Standard Cost	0.00 …
Unit Cost	1,172.70

Create a Work Request:

- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Tasks** Section ,select TAG Request menu,on the **Action Tab** ,click on the **Work Request** button to open the **Request Card**.
- Enter **Description**, select **equipment** fields.
- Select the appropriate information of request (**Priority, Raison Code, Problem Code**…).
- In the **Action Tab** Click on the **Create** button, TAG give you the **Request number** and the Uniform Document Number (**UDN**) from this Request.

Result:

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Create a Work Order from Request:

- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Tasks** Section ,select **TAG Request** menu, select the **Request** that you want to convert to work order and click on the **Card** button under **Home** tab to open the **Request Card**.
- Click **Create Order** button on the **Home** Tab
- Select the appropriate **options** to **create** a work order and click **Ok**.
- TAG give you a **Work order Number** and the **Uniform Document Number (UDN).**

Steps:

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Create a Manuel Work Order Using Copy Order feature:

- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Tasks** Section and click on the **Released Work Orders Menu**.
- Click on **New** Button on the ribbon.
- Tab over the **No**. field (or click on the **Description** field) to let TAG assign automatically a **No**.
- Go to the **Actions** TAB and click on the **Copy Order** Button.
- Select **Order Type** and The **Source Number** that you need to copy from it.
- Select the appropriate **options** and click Ok.

Steps:
Access to the Release Work Order Card :

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Create a Manuel Work Order:
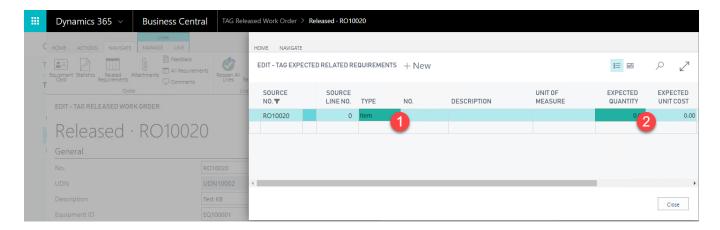
- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Tasks** Section and click on the **Released Work Orders Menu**.
- Click on **New** Button on the ribbon.
- Tab over the **No**. field (or click on the **Description** field) to let TAG assign automatically a **No**.
- Enter the **Description**, **Equipment ID, Maintenance Type** and other desired fields for this Work Order.
- Open the **Line** Section, either select a **work procedure** or enter the **description** task manually.
- You can also select a predefined **Template** to get the detail of the work order to be completed, go to the **Actions** Tab and click **Template** Button, select the **Template** and click **Update** button to populate this work order.

Steps:

Access to the Release Work Order Card :

Create a New Release Work Order :

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My Requests list:

- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Tasks** Section and click on the **Request List** menu.
- Select the desired Request and click on the Card button to open the Request card.
- Check the content of the request and/or complete the desired information.
- Click on the button **Create Order** to convert request to **work order**.
- Click on the button **Work Order** to open the converted work order card.

Steps :

Open Request Card :

Convert to a Work order and open the related Work Order card:

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Work Order Header and line Related Requiment:

- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Tasks** Section anc click on the **Released Work Order** menu.
- Select the desired work order and click navigate then open the card to open the work order card.
- On **Navigate** Tab, click on the **Related Requirement** button to enter the **expected quantity of item,consumable,osp,parts,tool or other for the Work Order header**.
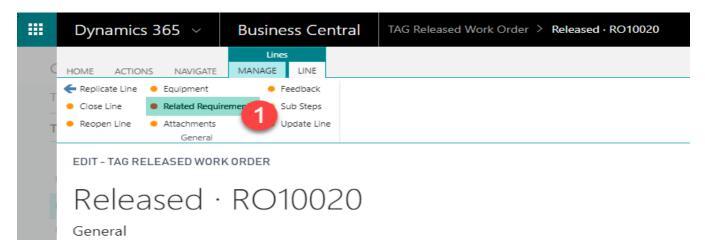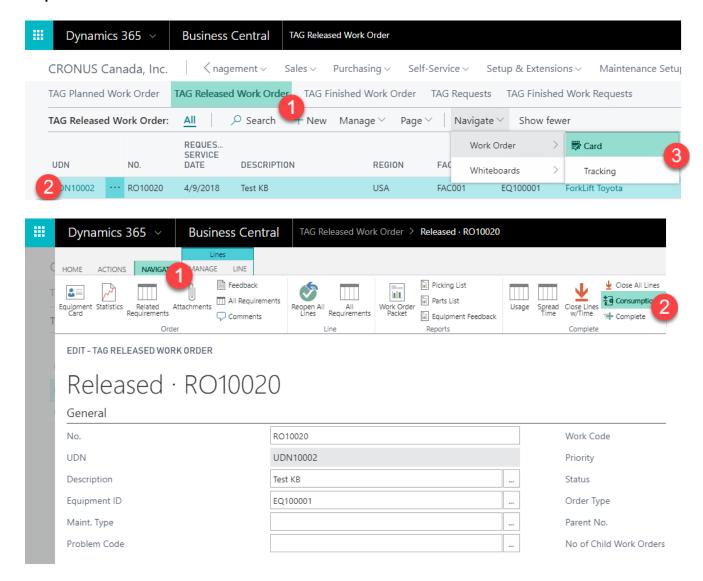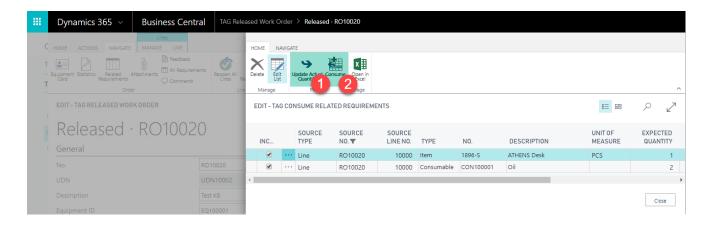- On the ribbon under **Lines** section Click on the **LINE** and click on the **related requirement** button to enter the **expected quantity of item, consumable, osp, parts, tool or other for the selected Work Order line**.

Steps :

Work Order header Related Requirement :

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Work Order line Related Requirement :

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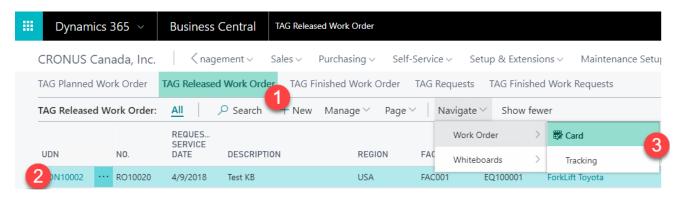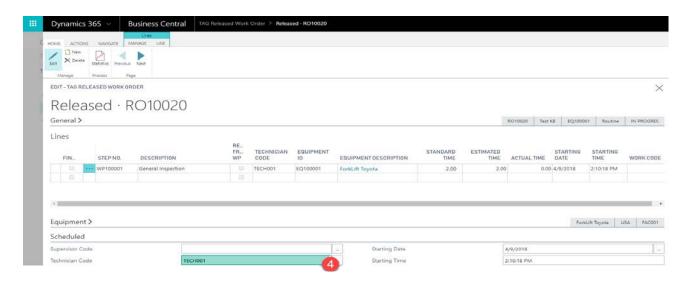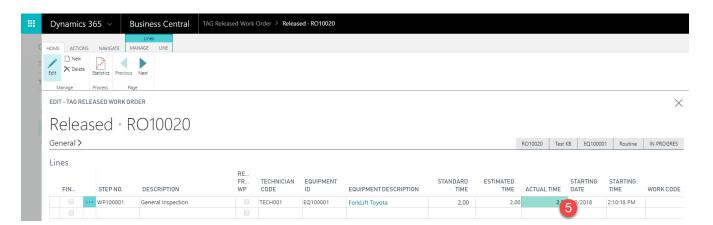TheAssetGuardian.com
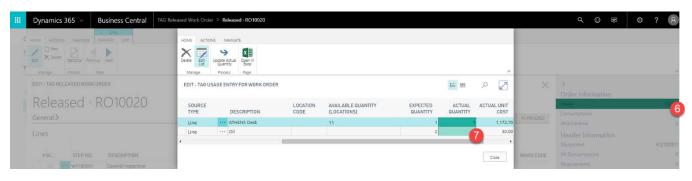
Consumption Work Order feature:

- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Tasks** Section and click on the **Released Work Order** menu.
- Select the **desired work order** and click **edit** to open the work order card.
- On **Navigate** Tab, Click on the Consumption button to open the inventory list to consume.
- Enter the **actual Quantity** for each line or click on the **Update Actual Quantity** to initialize by **Expected Quantity** values.
- Click on the Consume button to generate a **consumption work order.**

Steps :

Work Order Complete feature:

- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Tasks** Section and click on the **Released Work Order** menu.
- Select the **desired work order** and click **edit** to open the work order card.
- Enter the **technician** on the scheduled fast tab to assign it for all work order lines or enter it line by line.
- Enter the **actual time** for each work order line(Task).
- On the fact box panel, click **Usage link** to enter inventory **actual quantity.**
- On **Navigate** Tab, choose comments or feedback to enter the **work order feedback**.
- On **Navigate** Tab,click on the **Complete** button to complete and close this work order.

Steps :

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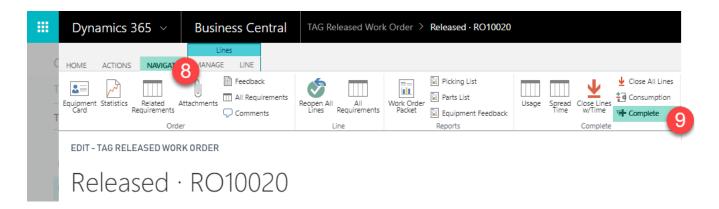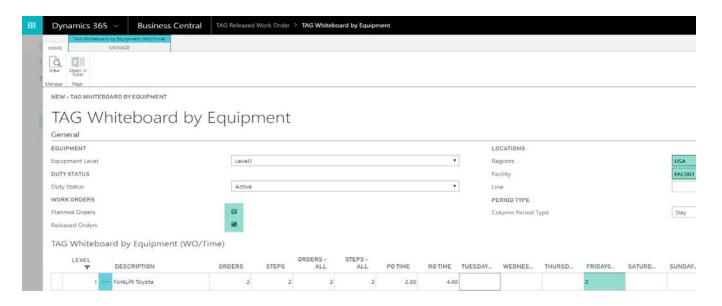info@TheAssetGuardian.com
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Equipment Whiteboard :

- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Tasks** Section ,Select Released Work Order Menu , on the **Action** Tab click on the **Equipment Whiteboard** button.
- Select the appropriate **filters** (**Region, Facility, Area**) if necessary.
- In the **Whiteboard by equipment** Section, you have the maintenance equipment planning view by day, week, month, quarter or year, for each column period you have the work order number and the work order expected time.
- Click on the equipment column period to open the whiteboard Detail section that can show you the list of released and planned work order equipment.
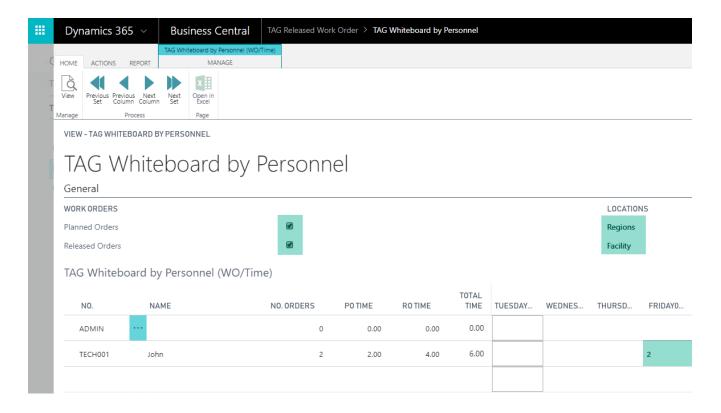
Steps:

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Personnel Whiteboard :

- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Tasks** Section , Select Released Work Order Menu ,on the Action Tab click on the **Personnel Whiteboard** button.
- Select the appropriate **filters** (**Region, facility, Area)** if necessary.
- In the **Whiteboard by Personnel** Section, you have the maintenance personnel planning view, for each day and each employee, you have the work order number and the work order expected time witch assigned to this employee.
- Click on the Personnel column period to open the whiteboard Detail section that can show you the list of released and planned work order assigned for the selected employee.
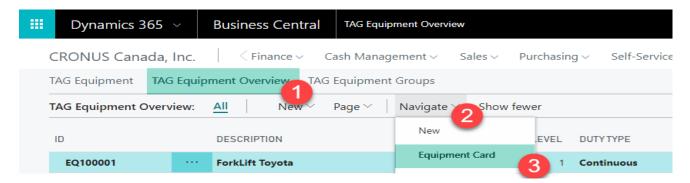
Steps:

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Reference finished work order statistics and equipment statistics

- Start from Tag **Business Manager** profile.
- Go to the **Maintenance Equipment** Section and click on the TAG **Equipment Overview** menu.
- Select Equipment and click on the **Equipment card** button to open the equipment card.
- On the Home Tab,click on the **Equipment statistics** button to open the Equipment statistics card.
- Click on the **Equipment Analysis** button to get another equipment statistics like finished work order by work code, statistics maintenance by work code.
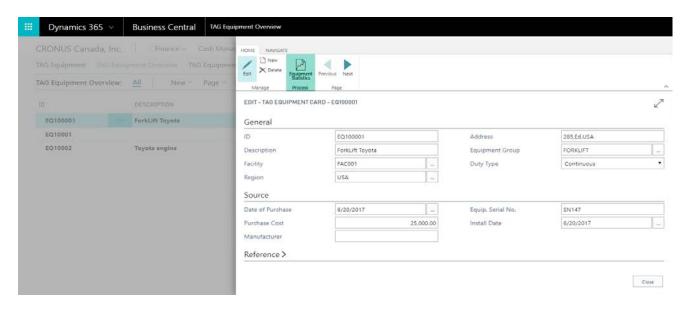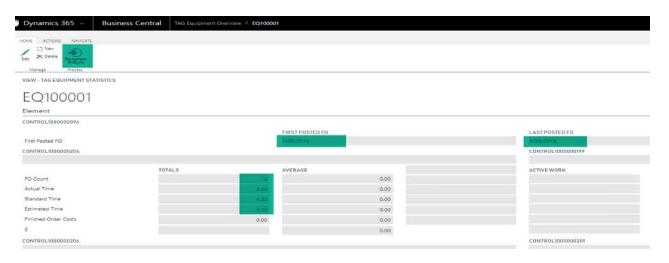
Steps :
Select Equipment :

Open Equipment statistics :

Equipment Analysis :

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