

2017

# Dynamics 365 - Project Service Automation Hands On Guide



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Microsoft

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## Introduction

Project Service Automation capabilities in Microsoft Dynamics 365 (online) provide an end-to-end solution that helps sales and delivery teams engage customers and deliver billable projects on time and within budget. Microsoft Dynamics 365 for Project Service Automation helps you:

- Estimate, quote, and contract work
- Plan and assign resources
- Enable team collaboration
- Capture time, expense, and progress data for real-time insights and accurate invoicing

### **Project-based contracts**

Project-based contracts relate quotes and orders to project plans, financial estimates, labor pricing, and billing arrangements, like time and materials or fixed price. The contract highlights key metrics, including profitability and feasibility.

### **Project planning**

Visual project planning and estimation includes predecessors, automatic task scheduling, and views of sales and cost information for time and expenses. You can use the resulting plan in quotes and project contracts.

### **Resource management**

Resource information includes the skills and proficiencies of your workforce. You can view and filter resources based on skills and availability, so you can assign the right people to the right projects. You can also track resource utilization and forecasting metrics.

### **Time, expenses, and collaboration**

Team members can use the web or mobile apps to record time and expenses for multiple projects. Managers can easily approve new entries while understanding the financial implications of the newly-approved items. All team members can collaborate with an Office 365 workspace created for their project.

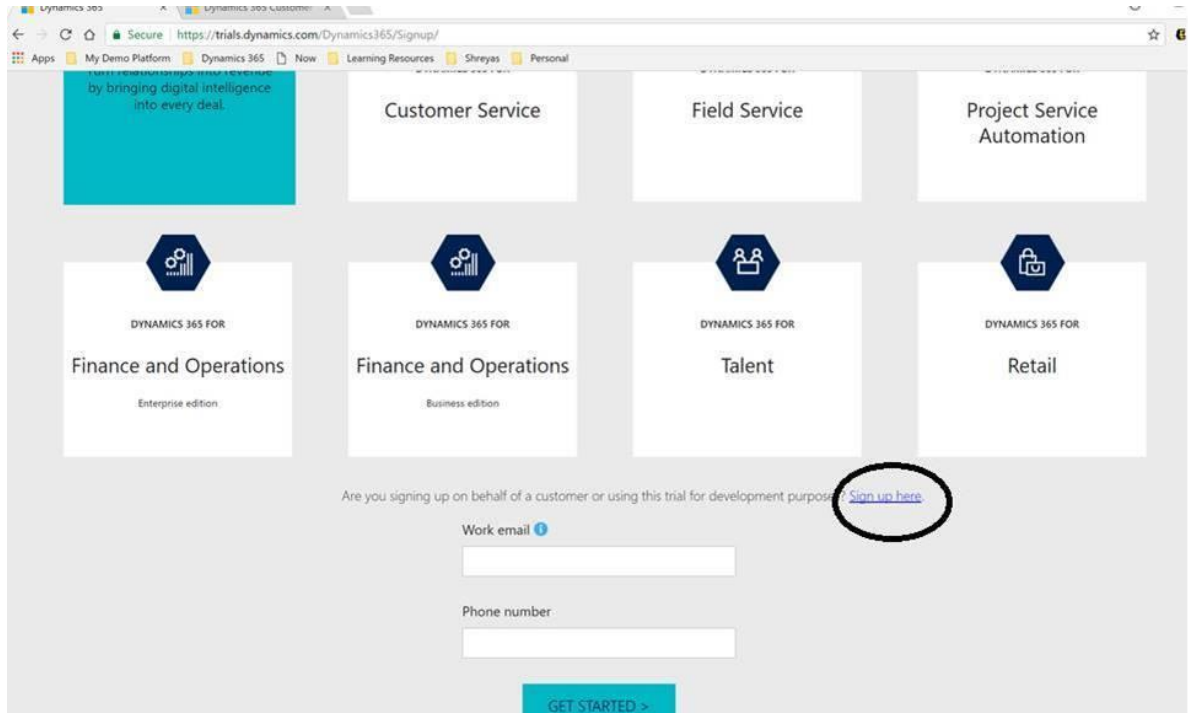
### **Project billing**

Project invoices reflect the terms of the contract and the approved work and expenses. The financial impact of project work, including costs, unbilled revenue, and invoices, are recorded for use in analytics and integration into financial systems.

## Prerequisites

1. Create a trial for Dynamics 365 – Project Service Automation using the following link <https://trials.dynamics.com/Dynamics365/Signup/>

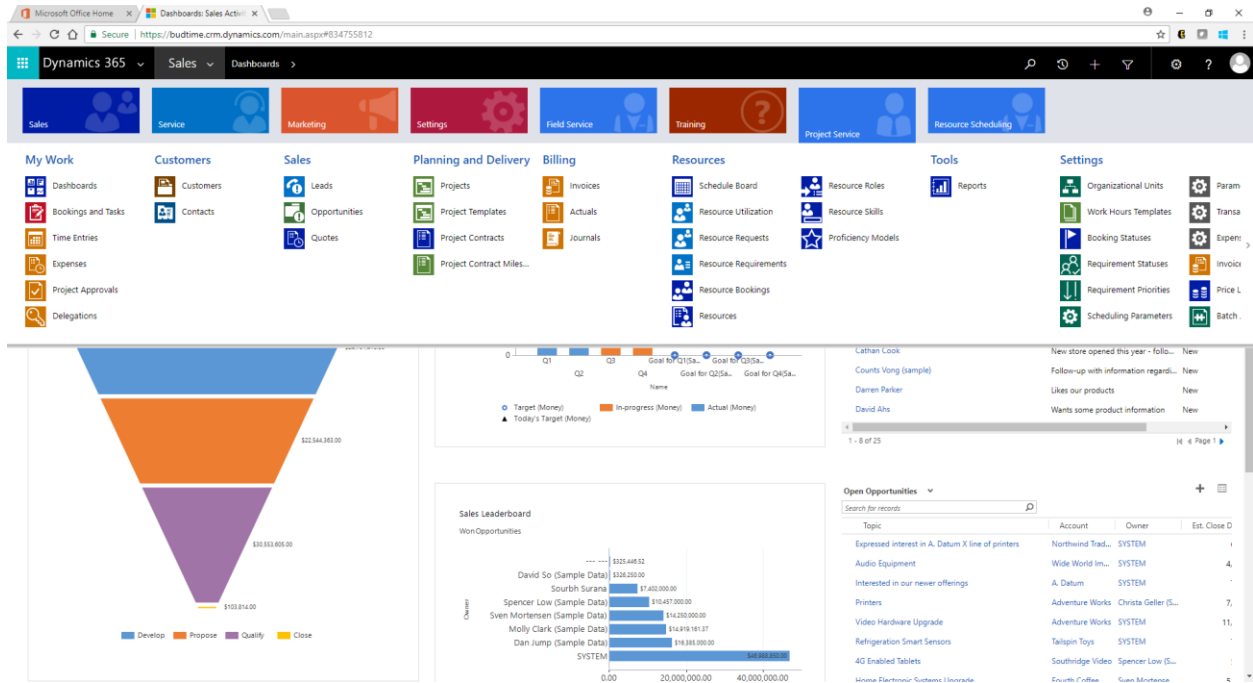
Just click on “Are you signing up on behalf of a customer or using this trial for development purposes? Sign up here”. You should be able to use your non domain id to create a trial instance.



The screenshot shows the Dynamics 365 Signup page. At the top, there is a navigation bar with the URL <https://trials.dynamics.com/Dynamics365/Signup/>. Below the navigation bar, there are several product tiles: Customer Service, Field Service, Project Service Automation, Finance and Operations (Enterprise edition), Finance and Operations (Business edition), Talent, and Retail. A teal banner on the left side reads "by bringing digital intelligence into every deal." Below the product tiles, there is a question: "Are you signing up on behalf of a customer or using this trial for development purposes?" followed by a link "Sign up here" which is circled in black. Below this link, there are input fields for "Work email" and "Phone number", and a "GET STARTED >" button.

# Creating Project Service Opportunity

Navigate to the Project service tab → Sales → Opportunities



This shows the list of open opportunities. Click on “New” button on the command bar.

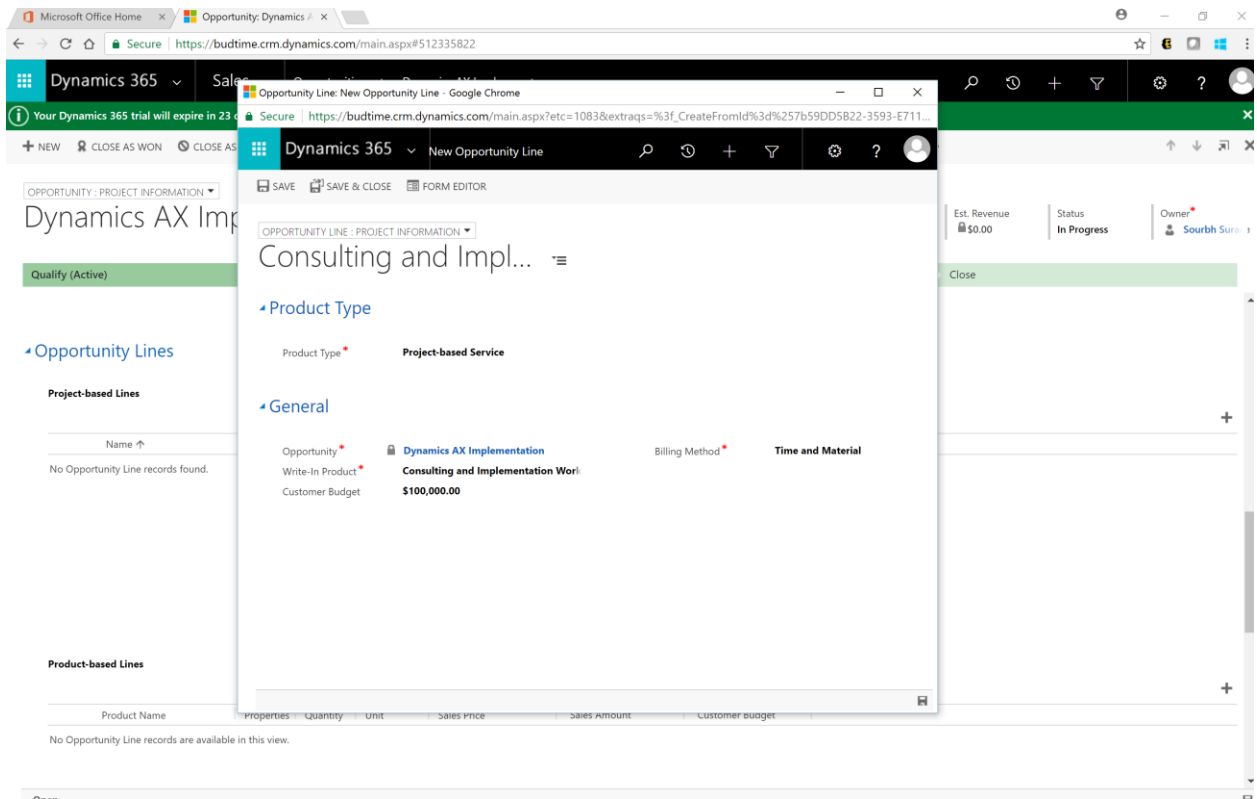
The screenshot shows the Dynamics 365 Open Opportunities list view. The command bar at the top includes buttons for New, Delete, Email Link, Run Report, Excel Templates, Export to Excel, Import Data, Chart Pane, and View. The table below lists various opportunities with columns for Topic, Account, Owner, Est. Close Date, Probability, Est. Revenue, Add to Forecast, and Forecast.

Topic	Account	Owner	Est. Close Date	Probability	Est. Revenue	Add to Forecast	Forecast
Expressed interest in A. Datum X line of printers	Northwind Trad...	SYSTEM	6/5/2016	70	\$10,568,900.00	No	\$235,000.00
Audio Equipment	Wide World Imp...	SYSTEM	4/20/2016	60	\$8,710,785.00	No	\$4,200,000.00
Interested in our newer offerings	A. Datum	SYSTEM	7/9/2016	60	\$7,500,000.00	No	\$2,143,500.00
Printers	Adventure Works	Christa Geller (S...	7/15/2016	80	\$4,991,300.00	No	\$4,108,800.00
Video Hardware Upgrade	Adventure Works	SYSTEM	11/30/2016	60	\$4,790,000.00	No	\$630,540.00
Refrigeration Smart Sensors	Tailspin Toys	SYSTEM	7/4/2016	40	\$3,550,000.00	No	\$1,420,000.00
4G Enabled Tablets	Southridge Video	Spencer Low (S...	9/4/2016	60	\$3,297,500.00	No	\$3,186,000.00
Home Electronic Systems Upgrade	Fourth Coffee	Sven Mortensen...	5/12/2016	20	\$3,142,000.00	No	\$628,400.00
Home PC	Adventure Works	South Surana	8/31/2016	20	\$2,470,860.00	No	
Notebooks	City Power & Lig...	SYSTEM	8/31/2016	60	\$2,441,475.00	No	\$2,217,000.00
Mobile Computing	Tailspin Toys	SYSTEM	11/2/2016	40	\$2,226,000.00	No	\$890,400.00
Mobile Computing Purchase	Blue Yonder AirL...	Sven Mortensen...	5/12/2016	40	\$2,187,500.00	No	\$1,448,550.00
Mobile Computing Expansion	Northwind Trad...	David So (Sampl...	7/17/2016	40	\$2,160,000.00	No	\$864,000.00
Product SKU J202	Adventure Works	Dan Jump (Sam...	12/9/2016	60	\$2,134,000.00	No	\$1,707,200.00
PC Selection	Humongous Ins...	Sven Mortensen...	7/13/2016	60	\$2,095,680.00	No	\$1,410,048.00
Video Hardware Update	Fourth Coffee	Dan Jump (Sam...	8/10/2016	30	\$2,086,850.00	No	\$241,250.00
PC	Fabrikam, Inc.	SYSTEM	12/10/2016	60	\$2,078,125.00	No	\$1,242,150.00
Computers	Tailspin Toys	SYSTEM	5/31/2016	60	\$2,000,000.00	No	\$648,000.00
Portable Computing	Northwind Trad...	Molly Clark (S...	7/27/2016	60	\$2,000,000.00	No	\$1,300,000.00
Laptops	Proseware, Inc.	Sven Mortensen...	5/26/2016	40	\$1,361,200.00	No	\$544,480.00
Some interest in our J1 line of products	City Power & Lig...	Molly Clark (S...	5/19/2016	40	\$1,023,000.00	No	\$818,400.00
Home Electronics Consolidation	The Phone Com...	Molly Clark (S...	6/15/2016	60	\$900,000.00	No	\$540,000.00
Home Entertainment	Fourth Coffee	SYSTEM	6/8/2016	30	\$607,500.00	No	\$403,750.00
Video Recording Equipment	Adventure Works	SYSTEM	5/10/2016	60	\$607,000.00	No	\$364,200.00

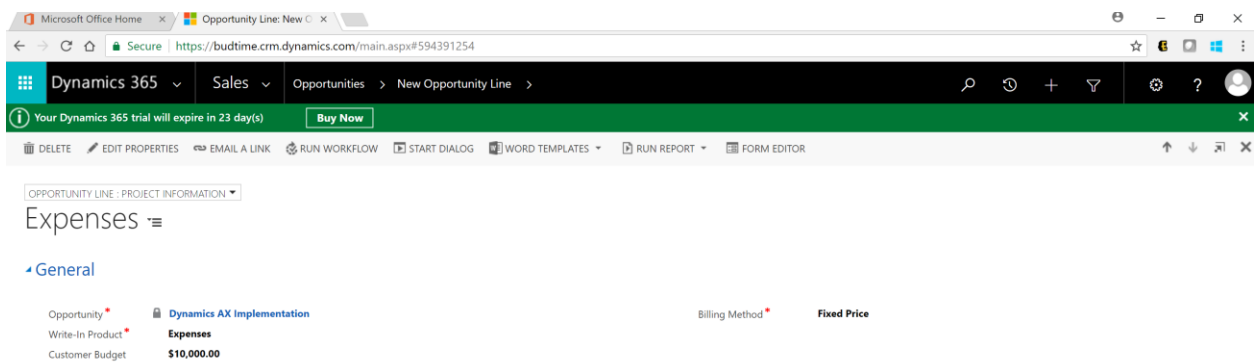
Add the fields as in the screenshot below and save

The screenshot displays the Microsoft Dynamics 365 CRM interface for an Opportunity record titled "Dynamics AX Implementation". The browser address bar shows the URL: `https://budtime.crm.dynamics.com/main.aspx#512335822`. The navigation pane includes "Dynamics 365", "Sales", "Opportunities", and "Dynamics AX Imple...". A green banner at the top indicates "Your Dynamics 365 trial will expire in 23 day(s)" with a "Buy Now" button. Below the banner, a toolbar contains various actions: NEW, CLOSE AS WON, CLOSE AS LOST, CLOSE ALL QUOTES, RECALCULATE OPPORTUN..., CONVERT TO WORK ORDER, FORM, PROCESS, and ASSIGN. The main content area shows the "OPPORTUNITY: PROJECT INFORMATION" section with the title "Dynamics AX Implementation" and a hamburger menu icon. To the right, key fields are displayed: "Est. Close Date" (..), "Est. Revenue" (\$0.00), "Status" (In Progress), and "Owner" (Sourbh Surana). A progress bar below the title shows four stages: "Quality (Active)", "Develop", "Propose", and "Close". Under "Quality (Active)", there are three items: "Identify Contact" (checked), "Identify Account" (with a "click to enter" link), and "Purchase Timeframe" (with a "click to enter" link). Under "Develop", there are two items: "Estimated Budget" (with a "click to enter" link) and "Purchase Process" (with a "click to enter" link). Under "Propose", there is one item: "Identify Decision Maker" (with a "mark complete" link). Under "Close", there is one item: "Capture Summary" (with a "click to enter" link). Below the progress bar, the text "Opportunity Sales Process" and "Next Stage" with a plus icon are visible. The "Summary" section is expanded, showing a list of fields on the left and their values on the right. The fields include: Topic (Dynamics AX Implementation), Contact (..), Account (Active Transport Inc.), Account Manager (Sourbh Surana), Contracting Unit (Contoso US), Purchase Timeframe (..), Currency (US Dollar), Product Price List (US Bill Rates 2016), Revenue (System Calculated), Budget Amount (..), Probability (..), Rating (Warm), Purchase Process (..), and Description (..). The "POSTS" section shows a "Dynamics AX Implementation" post with the text: "Opportunity: Created by Sourbh Surana for Account Active Transport Inc. On Dynamics AX Implementation's wall Today". The "STAKEHOLDERS" and "SALES TEAM" sections both show "No stakeholders found." and "No sales team members found." respectively. The "Open" button is visible at the bottom left.

Now scroll down to the Opportunity lines. We will add couple of project based lines here. Click on the + sign to the right of the the project-based lines



We will also add one more line for expenses as fixed billing method.



We can also add products to the same opportunity using the product based lines.

Let's navigate to the product catalog by clicking on Settings → Product Catalog → Families & Products

Microsoft Office Home | Opportunity: Dynamics | X

Secure | https://budtime.crm.dynamics.com/main.aspx#47138848

Dynamics 365 | Settings | Product Catalog

Your Dynamics 365 trial will expire in 23 day(s) | Buy Now

**Families & Products**

A product is an item in the product catalog that you want to sell to your customers. In this section, you manage products, set up product family hierarchies, create product bundles, and manage properties of product records. You can publish, revise, or retire product records, and also reclassify them to move them to other areas of the product catalog.

**Price Lists**

A price list specifies what prices can be charged for each unit in the unit group of a product. In this section, you create, manage, and delete price list items and price lists in the product catalog. You associate and disassociate products with price lists. You also specify various pricing options in the price list line items, such as the quantity selling option, the pricing method, and the rounding options.

**Discount Lists**

A discount list contains the specific discounts that can be applied to a product, based on volume purchased. In this section, you create, manage, and delete discount lists in the product catalog.

**Unit Groups**

A unit group contains the base unit a product is available in, such as a liter, and then lists all the different increments that this base unit is packaged for sale. For example, if the base unit is a two-liter bottle, then that product could be sold individually as a two-liter bottle or in a case containing 6 two-liter bottles. In this section, you create, manage, and delete units and unit groups in the product catalog.

You should be able to see the pre-existing products, families and bundles. Navigate to or Search for “Subscription Software” and open it up.

Microsoft Office Home | Products All Products, F... | X

Secure | https://budtime.crm.dynamics.com/main.aspx#330668345

Dynamics 365 | Settings | Product Catalog

Your Dynamics 365 trial will expire in 23 day(s) | Buy Now

ADD FAMILY | ADD PRODUCT | ADD BUNDLE | PUBLISH | CLONE | REVISE | RETIRE | RECLASSIFY | EDIT

All Products, Families & Bundles

Search for records

Name	Product ID	Hierarchy Path	Valid From	Valid To	Status	Product Structure
SV Keyboard E10	5637146446				Active	Product
Surge Protectors		Surge Protectors			Active	Product
Subscription Software	Subscription Sof...				Active	Product Family
Southridge Video Roundtable RT302	045321				Active	Product
Southridge LCD24 X300	5637146377				Active	Product
Southridge LCD22W M200	5637146383				Active	Product
Southridge LCD22 M200	5637146381				Active	Product
Southridge LCD20W M240	5637146387				Active	Product
Southridge LCD20 M210	5637146385				Active	Product
Southridge Laptop8.9 E0890	5637146268				Active	Product
Southridge Laptop19W X1980	5637146272				Active	Product
Southridge Laptop16 M1601	5637146284				Active	Product
Southridge Laptop15.4W M1548	5637146264				Active	Product
Southridge Laptop15 M1501	5637146276				Active	Product
Southridge Laptop12 M1201	5637146280				Active	Product
Southridge Desktop PC3.60 ED360	5637146336				Active	Product
Southridge Desktop PC3.0 MS300	5637146345				Active	Product
Southridge Desktop PC2.33 XD233	5637146330				Active	Product
Southridge Desktop PC2.30 MD230	5637146333				Active	Product
Southridge Desktop PC1.80 ED182	5637146342				Active	Product
Southridge Desktop PC1.80 ED180	5637146339				Active	Product

1 - 163 of 163 (1 selected) | Page 1

All # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



Please note that subscription software has been set up with some properties

The screenshot shows the Dynamics 365 interface for configuring a product family. The browser address bar shows the URL: <https://budtime.crm.dynamics.com/main.aspx#324998374>. The page title is "Product Family: Subscription Software". A green banner at the top indicates "Your Dynamics 365 trial will expire in 23 day(s)" with a "Buy Now" button. The page is divided into two main sections: "PRODUCT DETAILS" and "PRODUCT PROPERTIES".

**PRODUCT DETAILS**

Name	Subscription Software	Unit Group	Business User
Product ID	Subscription Software	Default Unit	Standard User
Family Hierarchy	--	Default Price List	--
Valid From	--	Decimals Supported	2
Valid To	--	Subject	--
Description	--		

**PRODUCT PROPERTIES**

Name ↑	Base Property	Data Type	Read-Only	Required	Hidden	Default Value
No of Months		Whole Number	No	No	No	3
No of Users		Whole Number	No	No	No	10

At the bottom left, the status "Active" is displayed.

Close it to get back to the view and with Subscription Software selected, click on add a new product. We will be adding Dynamics AX licenses to this product family.

The screenshot shows the Dynamics 365 interface for a product named "Dynamics AX Licenses". The page is in a "Draft" status. It features a navigation bar at the top with "Dynamics 365", "Sales", and "Products" menus. Below the navigation bar, there is a green banner indicating a trial expiration. The main content area is divided into two sections: "PRODUCT DETAILS" and "PRODUCT PROPERTIES".

**PRODUCT DETAILS**

Name	Dynamics AX Licenses	Unit Group	Business User
Product ID	Dynamics AX Licenses	Default Unit	Standard User
Family Hierarchy	Subscription Software	Default Price List	Standard
Valid From	--	Decimals Supported	2
Valid To	--	Subject	--
Description	--		

**PRODUCT PROPERTIES**

Name	Base Property	Data Type	Read-Only	Required	Hidden	Default Value
No of Months		Whole Number	No	No	No	3
No of Users		Whole Number	No	No	No	10

The page also includes a "Draft" status indicator at the bottom left.

Scroll down and add a price list

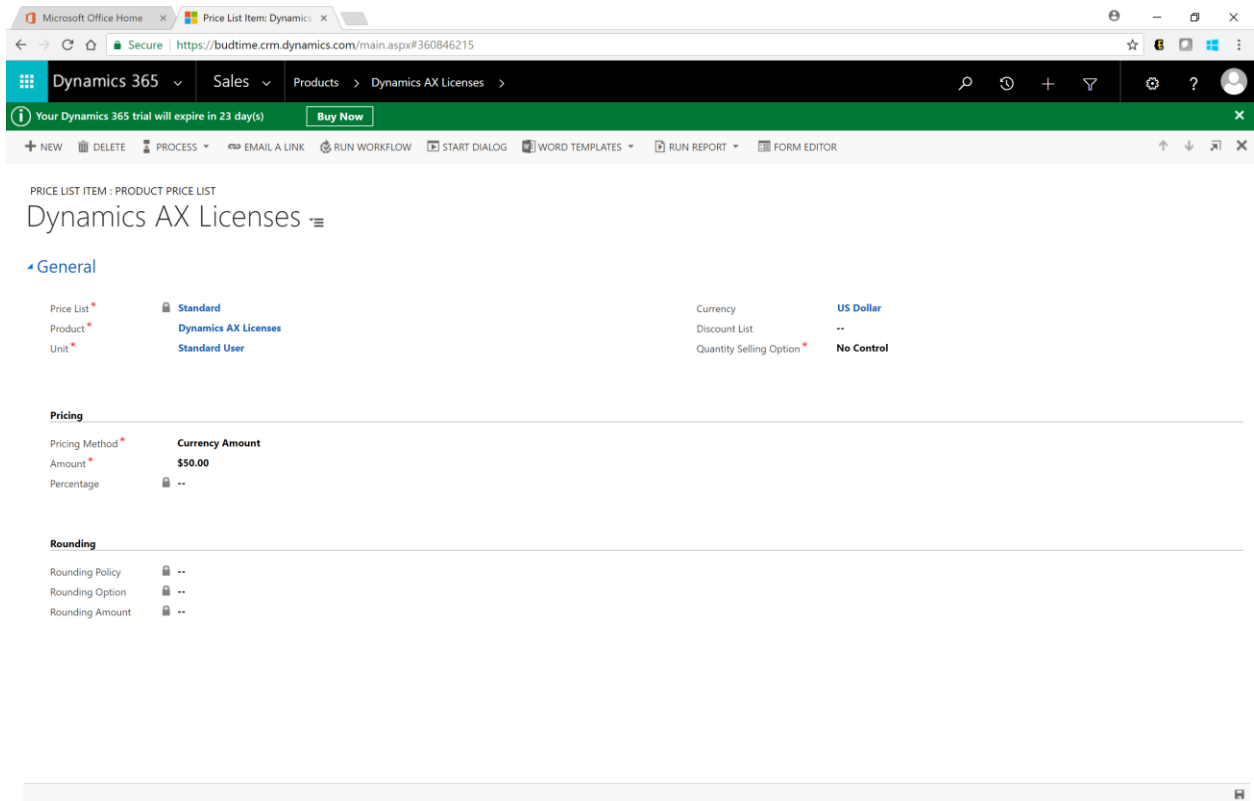
And select the price list as default price list on the product.

Click on "Publish" to make product active.

## ADDITIONAL DETAILS

**PRICE LIST ITEMS** + [Menu]

Price List	Unit	Pricing Metho...	Amount	Percentage
Standard	Standard User	Currency Amount	\$50.00	



This product needs to be added to the pricelist used by the opportunity if it has to show up in the opportunity. Navigate to Project service → Price lists and find & open the “US Bill Rates 2016” Price list. Scroll down to the Pricelist Items and add the Dynamics AX licenses.

The screenshot shows a web browser window with the URL <https://budtime.crm.dynamics.com/main.aspx#35227553>. The Dynamics 365 navigation bar includes 'Dynamics 365', 'Project Service', 'Price Lists', and 'US Bill Rates 2016'. A green banner at the top indicates 'Your Dynamics 365 trial will expire in 23 day(s)' with a 'Buy Now' button. Below the navigation, the page title is 'PRICE LIST : PRICE LEVEL US Bill Rates 2016'. The status is 'Active'. A link for 'Price List Items' is visible. A list of products is shown, including 'CRM 3-Year Enterprise' (highlighted) and 'Dynamics AX Licenses'. The page shows '1 - 4 of 9' items and 'Page 1'.

Now navigate back to the opportunity and add the product created to the opportunity, navigate to the product based lines and add the Dynamics AX Licenses with quantity of 50.

OPPORTUNITY: PROJECT INFORMATION

# Dynamics AX Implementation

Est. Close Date -- | Est. Revenue \$112,500.00 | Status In Progress | Owner Sam Surana



## Product-based Lines

Product Name	Properties	Quantity	Unit	Sales Price	Sales Amount	Customer Budget
Dynamics AX Licenses	<a href="#">Edit</a>	50.00000	Standard User	\$50.00	\$2,500.00	

Total Amount \$112,500.00

## Quotes

Open

# Quote Creation

In the opportunity, scroll down to the “Quotes” section and click on + to create new quote.

The screenshot shows the Dynamics 365 interface for a quote titled "Dynamics AX Implementation". The top navigation bar includes "Dynamics 365", "Project Service", and "Quotes". A green banner indicates "Your Dynamics 365 trial will expire in 23 day(s)". The quote details include:

- Total Amount: \$112,500.00
- Status: Draft
- Status Reason: In Progress
- Owner: Sam Surana

Key sections include:

- Quote Analysis:**
  - Profitable:** Gross Margin (%) 100.00, Adjusted Gross Margin 100.00
  - Outside Customer Expectations:** Estimated Schedule: Schedule Not Available, Estimated Budget: Exceeds Customer Budget
- Summary:** Quote ID: QUO-00018-QBVOH2, Revision ID: 0, Name: Dynamics AX Implementation, Potential Customer: Active Transport Inc., Account Manager: Sam Surana, Contracting Unit: Contoso US, Opportunity: Dynamics AX Implementation, Product Price List: US Bill Rates 2016, Requested Delivery D: --, Quote Expires On: --, Status Reason: In Progress
- Activities:** No activity records found.
- Quote Lines:** Draft

Go to the quote lines

Open “consulting and implementation” and mark the include expense as No. This will make sure that expenses are not charged on this project.

Open the “Expenses” and mark the include time and include fee as No. This will make sure that only expenses are charged on this project.

## Quote Lines

Project-based Lines

Name	Billing Method	Project	Include Time	Include Expense	Include Fee	Quoted Amount	Customer Budget
Consulting and Impl...	Time and Material		Yes	No	Yes	\$100,000.00	\$100,000.00
Expenses	Fixed Price		No	Yes	No	\$10,000.00	\$10,000.00

Open the Consulting and Implementation Quote line and create quote line details as shown below.

Microsoft Office Home | Quote Line: New Quote | dynamics 365 quote line | Quote Lines (Project Bas...

Secure | https://budtime.crm.dynamics.com/main.aspx#201212977

Dynamics 365 | Sales | Quotes | New Quote Line

Your Dynamics 365 trial will expire in 22 day(s) | Buy Now

OPEN COST DETAIL | DELETE SELECTED DETAILS | DELETE | CREATE INVOICE SCHEDULE | EDIT PROPERTIES | EMAIL A LINK | RUN WORKFLOW | START DIALOG | WORD TEMPLATES

QUOTE LINE : PROJECT INFORMATION

## Consulting and Implementation Work

General

Name: Consulting and Implementation Work | Include Time: Yes

Billing Method: Time and Material | Include Expense: No

Project: .. | Include Fee: Yes

Quoted Amount: \$100,000.00 | Estimated Tax: \$0.00

Quoted Amount After: \$100,000.00 | Budget Amount: \$100,000.00

Invoice Frequency: BiMonthly | Billing Start Date: ..

Quote Line Details

Quote Line	Description	Billing Type	Transaction Class	Resourcing unit	Category	Role	Start Date	End Date	Quantity	Unit	Sales P
29EE6FDC-3D93-E711-81...	Architect	Chargeable	Time	Contoso_US		Architect	9/6/2017	9/6/2017	200.00	Hour	
29EE6FDC-3D93-E711-81...	Project Manager	Chargeable	Time	Contoso US		Project Manager	9/6/2017	9/6/2017	200.00	Hour	
29EE6FDC-3D93-E711-81...	Developer	Chargeable	Time	Contoso US		Developer	9/6/2017	9/30/2017	200.00	Hour	

Open the Expenses quote line and create quote line details as shown below

Microsoft Office Home | Quote Line: New Quote | dynamics 365 quote line | Quote Lines (Project Bas...

Secure | https://budtime.crm.dynamics.com/main.aspx#112037979

Dynamics 365 | Sales | Quotes | New Quote Line

Your Dynamics 365 trial will expire in 22 day(s) | Buy Now

OPEN COST DETAIL | DELETE SELECTED DETAILS | DELETE | GENERATE PERIODIC MILE... | EDIT PROPERTIES | EMAIL A LINK | RUN WORKFLOW | START DIALOG | WORD TEMPLATES

QUOTE LINE: PROJECT INFORMATION

## Expenses

The sum of the amount in billing milestones, 0, must be equal to the line amount 10000.

### General

Name	<b>Expenses</b>	Include Time	No	Quoted Amount	\$10,000.00
Billing Method	<b>Fixed Price</b>	Include Expense	Yes	Estimated Tax	\$0.00
Project	--	Include Fee	No	Quoted Amount After	\$10,000.00
				Budget Amount	\$10,000.00
				Invoice Frequency	BiMonthly
				Billing Start Date	--

### Quote Line Details

Quote Line	Description	Billing Type	Transaction Class	Resourcing unit	Category	Role	Start Date	End Date	Quantity	Unit	Sales P
2AEE6FDC-3D93-E711-81...	Trips	Chargeable	Expense	Contoso US			9/6/2017	9/6/2017	10.00	Primary Unit	\$

Scroll to the profitability analysis section on the quote and refresh the fields Total Chargeable cost and Total Non Chargeable cost. Also if the charts are not displaying, click on "Click here to load the charts" link.



Microsoft Office Home x Quote: Dynamics AX Im... x dynamics 365 quote line... x Quote Lines (Project Bas... x

Secure | https://budtime.crm.dynamics.com/main.aspx#303590807

Dynamics 365 Sales Quotes Dynamics AX Imple... Buy Now

Your Dynamics 365 trial will expire in 22 day(s)

NEW CLOSE AS WON CLOSE AS LOST DELETE LOOK UP ADDRESS PROCESS ASSIGN SHARE EMAIL A LINK

QUOTE : PROJECT INFORMATION

# Dynamics AX Implementation

Total Amount \$112,500.00 Status Draft Status Reason In Progress Owner Sam Surana

## Profitability Analysis

**Key Metrics**

Total Chargeable Cost	\$75,500.00	Total Revenue	\$112,500.00	Gross Margin (%)	32.89	<b>Profitable</b>
Total Non-chargeable	\$0.00	Total Revenue (Base)	\$112,500.00	Adjusted Gross Margi	32.89	

**Distribution of cost and revenue**

Revenue and cost over time  
Monthly breakdown

Month (End Date Time)	Cost	Project Contract
Sep 2017	\$75,500.00	\$112,500.00

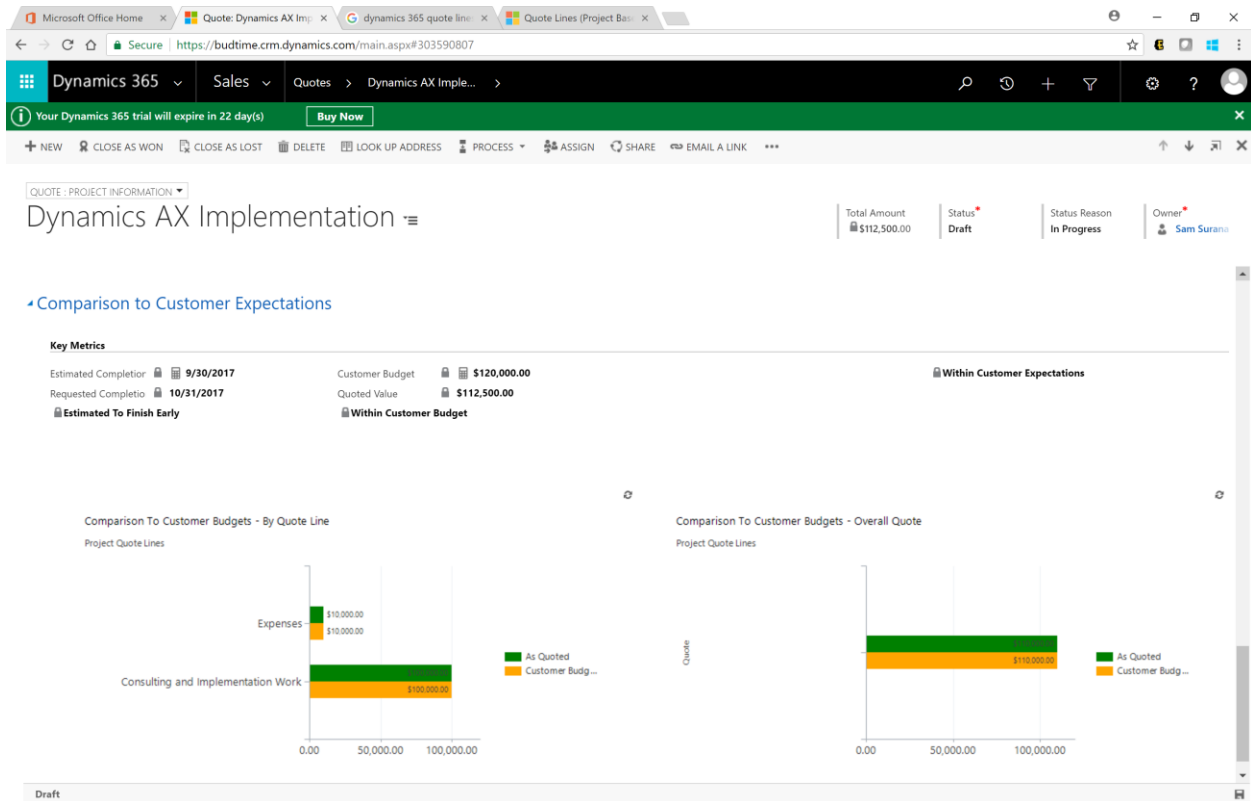
**Associated Revenue**  
Amount by role

Role	Sum (Amount) (\$)
(blan...	\$2,500.00
Archi...	\$30,000.00
Devel...	\$30,000.00
Proje...	\$40,000.00

Comparison to Customer Expectations

javascript;

Now scroll to the “Comparison to Customer Expectations Section”



Now let's convert the quote to a contract or an order by marking it as Won. A project contract is created and all the fields from quote are copied to the order. This action also makes the quote read only.

A project can be attached to either quote line or the order lines based on the practice of the organization. Here I will be creating and attaching the project to the order lines shortly.

Microsoft Office Home | Quote: Dynamics AX Im... | dynamics 365 quote line... | Quote Lines (Project Ba... |

Secure | https://budtime.crm.dynamics.com/main.aspx#303590807

Dynamics 365 | Sales | Quotes | Dynamics AX Imple... |

Your Dynamics 365 trial will expire in 22 day(s) | Buy Now

+ NEW | CLOSE AS WON | CLOSE AS LOST | DELETE | LOOK UP ADDRESS | PROCESS | ASSIGN | SHARE | EMAIL A LINK |

QUOTE : PROJECT INFORMATION

# Dynamics AX Implementation

Total Amount: \$112,500.00 | Status: Draft | Status Reason: In Progress | Owner: Sam Surana

## Comparison to Customer Expectations

**Key Metrics**

Estimated Completion: 9/30/2017	Customer Budget: \$120,000.00	Within Customer Expectations
Requested Completion: 10/31/2017	Quoted Value: \$112,500.00	

Estimated To Finish Early | Within Customer Budget

Comparison To Customer Budgets - By Quote Line

Project Quote Lines

Quote Line	As Quoted	Customer Budget
Expenses	\$10,000.00	\$10,000.00
Consulting and Implementation Work	\$100,000.00	\$110,000.00

Comparison To Customer Budgets - Overall Quote

Project Quote Lines

Category	As Quoted	Customer Budget
Quote	\$112,500.00	\$120,000.00

Draft

Now scroll down to the “Contract Lines” and click on the “Consulting & Implementation” in project based lines. See that the project field is blank. Click on it and create a new project. Enter the relevant details by selecting Project template as “Agile Template”.

The screenshot shows the Dynamics 365 Project Service interface for an 'AX Implementation Project'. The browser address bar indicates the URL: <https://budtime.crm.dynamics.com/main.aspx#585157408>. The navigation pane shows 'Project Service' > 'Projects' > 'AX Implementation ...'. A green banner at the top indicates 'Your Dynamics 365 trial will expire in 22 day(s)' with a 'Buy Now' button. Below the navigation, a 'PROJECT : INFORMATION' section displays 'AX Implementation Project' with key metrics: Due Date (3/13/2018), Estimated Cost (\$113,920.00), Cost Consumption % (0.00), and Progress % (0.00). A process bar shows stages: New, Quote, Plan (Active for 10 minutes), Deliver, Complete, and Close. The 'Summary' section is expanded, showing details for General, Estimates, and Actuals.

General		Estimates		Actuals	
Name	AX Implementation Project	Estimated Start Date	9/11/2017	Actual Start	--
Description	--	Estimated Finish Date	3/13/2018	Actual End	--
Customer	Active Transport Inc.	Estimated Hours	1,096.00	Actual Hours	0.00
Calendar template	Default Work Template	Estimated Cost	\$113,920.00	Actual Cost	\$0.00
Currency	US Dollar				
Contracting Unit	Contoso US				
Project Manager	Sam Surana				
Project Template	Agile Template				

The 'Sales' section shows a 'Project Contract' table with one entry:

Name	Billing Method	Amount	Order	Contract Status (Order)	Customer (Order)
Consulting and Implementation W...	Time and Mater...	\$100,000.00	Dynamics AX Implementa...	Draft	Active Transport Inc.

The status bar at the bottom indicates 'Active'.

Note that the Business process bar readily tells you which stage of the project you are at. Now click on the Workbreak down structure in navigation. Give it a few seconds to load.

Microsoft Office Home | Project: AX Implementa... | dynamics 365 quote line... | Quote Lines (Project Ba... |

Secure | https://budtime.crm.dynamics.com/main.aspx#585157408

Dynamics 365 | Project Service | Projects > AX Implementation ...

**Common**

- Documents
- Office 365 Groups
- Work breakdown stru...
- Project estimates
- Project tracking
- Project Team Members
- Resource Requirements
- Actuals

---

**Name** AX Implementation Project

**Description** ..

**Customer** Active Transport Inc.

**Calendar template** Default Work Template

**Currency** US Dollar

**Contracting Unit** Contoso US

**Project Manager** Sam Surana

**Project Template** Agile Template

**Estimated Start Date** 9/11/2017

**Estimated Finish Date** 3/13/2018

**Estimated Hours** 1,096.00

**Estimated Cost** \$113,920.00

**Actual Start** ..

**Actual End** ..

**Actual Hours** 0.00

**Actual Cost** \$0.00

**Sales**

**Project Contract**

Name	Billing Method	Amount	Order	Contract Status (Order)	Customer (Order)
Consulting and Implementation W...	Time and Mater...	\$100,000.00	Dynamics AX Implementa...	Draft	Active Transport Inc.

https://budtime.crm.dynamics.com/javascript;

Microsoft Office Home | Project: AX Implementa... | dynamics 365 quote line... | Quote Lines (Project Ba... |

Secure | https://budtime.crm.dynamics.com/main.aspx#585157408

Dynamics 365 | Project Service | Projects > AX Implementation ...

Your Dynamics 365 trial will expire in 22 day(s) [Buy Now](#)

**PROJECT : INFORMATION**

**AX Implementation Project**

**Due Date** 3/13/2018

**Estimated Cost** \$113,920.00

**Cost Consumption %** 0.00

**Progress %** 0.00

New | Quote | Plan (Active for 10 minutes) | Deliver | Complete | Close

REFRESH | ADD TASK | DELETE | INDENT | OUTDENT | MOVE UP | MOVE DOWN | HIDE GANTT | GENERATE PROJECT TEAM | MOVE PROJECT | CHOOSE COLUMNS | TIME SCALE: Year

Task Mode	WBS ID	Task Name	Precedes...	Effort H...	Start Date	End Date	Duration	Assigned Roles	Resources	2017				2018			
		Search for task name						Search for assign	Search for resources	Jul	Oct	Jan	Apr				
		<b>AX Implementation Project</b>		<b>1096</b>	<b>9/11/2017</b>	<b>3/13/2018</b>	<b>132</b>										
	1	Project kickoff		40	9/11/2017	9/15/2017	5	Functional cons...									
	2	<b>Sprint 1</b>		<b>510</b>	<b>9/15/2017</b>	<b>12/11/2017</b>	<b>62</b>										
	2.1	Discover	1	50	9/15/2017	9/25/2017	7	Functional cons...									
	2.2	Design	2.1	40	9/26/2017	10/2/2017	5	Architect									
	2.3	Develop	2.2	400	10/3/2017	12/11/2017	50	Developer									
	2.4	Test	2.2	20	10/3/2017	10/5/2017	3	Functional cons...									
	3	<b>Sprint 2</b>		<b>490</b>	<b>12/12/2017</b>	<b>3/2/2018</b>	<b>59</b>										
	3.1	Analyse & Discover	2	30	12/12/2017	12/15/2017	4	Functional cons...									
	3.2	Incremental Design	3.1	40	12/18/2017	12/22/2017	5	Architect									
	3.3	Develop & Integrate	3.2	400	12/25/2017	3/2/2018	50	Developer									
	3.4	End to end test	3.2	20	12/25/2017	12/27/2017	3	Functional cons...									
	4	Training and Handoff	3	40	3/5/2018	3/9/2018	5	Functional cons...									
	5	Project complete	4	16	3/12/2018	3/13/2018	2	Program Manag...									

Active

Here you can make changes to the project plan for example increase the design effort hrs to 40 and the develop hrs to 400.

From the navigation bar, click on the project estimates to look at the estimates in Time phase by cost, effort and sales manner or just in grid.

The screenshot shows the Dynamics 365 Project Service interface for the 'AX Implementation Project'. The top navigation bar includes 'Dynamics 365', 'Project Service', and 'Projects > AX Implementation ...'. A green banner at the top indicates 'Your Dynamics 365 trial will expire in 22 day(s)'. The project information section shows 'AX Implementation Project' with a due date of 3/13/2018, estimated cost of \$113,920.00, cost consumption of 0.00, and progress of 0.00. The main area displays a project plan grid with columns for tasks, start/end dates, and weekly cost estimates from 9/10/2017 to 10/22/2017. The grid is organized by role: Functional consultant (6), Architect (2), Developer (2), and Program Manager (1). The total cost for each week is shown at the bottom of the grid.

Task	Estimated Start Date	Estimated End Date	9/10/2017	9/17/2017	9/24/2017	10/1/2017	10/8/2017	10/15/2017	10/22/2017
<b>Functional consultant ( 6 )</b>			9,600.00	8,000.00	400.00	4,000.00			
Project kickoff - Functional	9/11/2017	9/15/2017	8,000.00						
Discover	9/15/2017	9/25/2017	1,600.00	8,000.00	400.00				
Test	10/3/2017	10/5/2017				4,000.00			
Analyse & Discover	12/12/2017	12/15/2017							
End to end test	12/25/2017	12/27/2017							
Training and Handoff	3/5/2018	3/9/2018							
<b>Architect ( 2 )</b>					4,800.00	1,200.00			
Design	9/26/2017	10/2/2017			4,800.00	1,200.00			
Incremental Design	12/18/2017	12/22/2017							
<b>Developer ( 2 )</b>						4,800.00	6,000.00	6,000.00	6,000.00
Develop	10/3/2017	12/11/2017				4,800.00	6,000.00	6,000.00	6,000.00
Develop & Integrate	12/25/2017	3/2/2018							
<b>Program Manager ( 1 )</b>									
Project complete	3/12/2018	3/13/2018							
			9,600.00	8,000.00	5,200.00	10,000.00	6,000.00	6,000.00	6,000.00

Go back to the project and click on OPEN IN MS PROJECT. If you have installed the PSA addin for MS project then this should open the MS PROJECT. If not, you can install it from the following link.

<https://www.microsoft.com/en-us/download/details.aspx?id=54299>

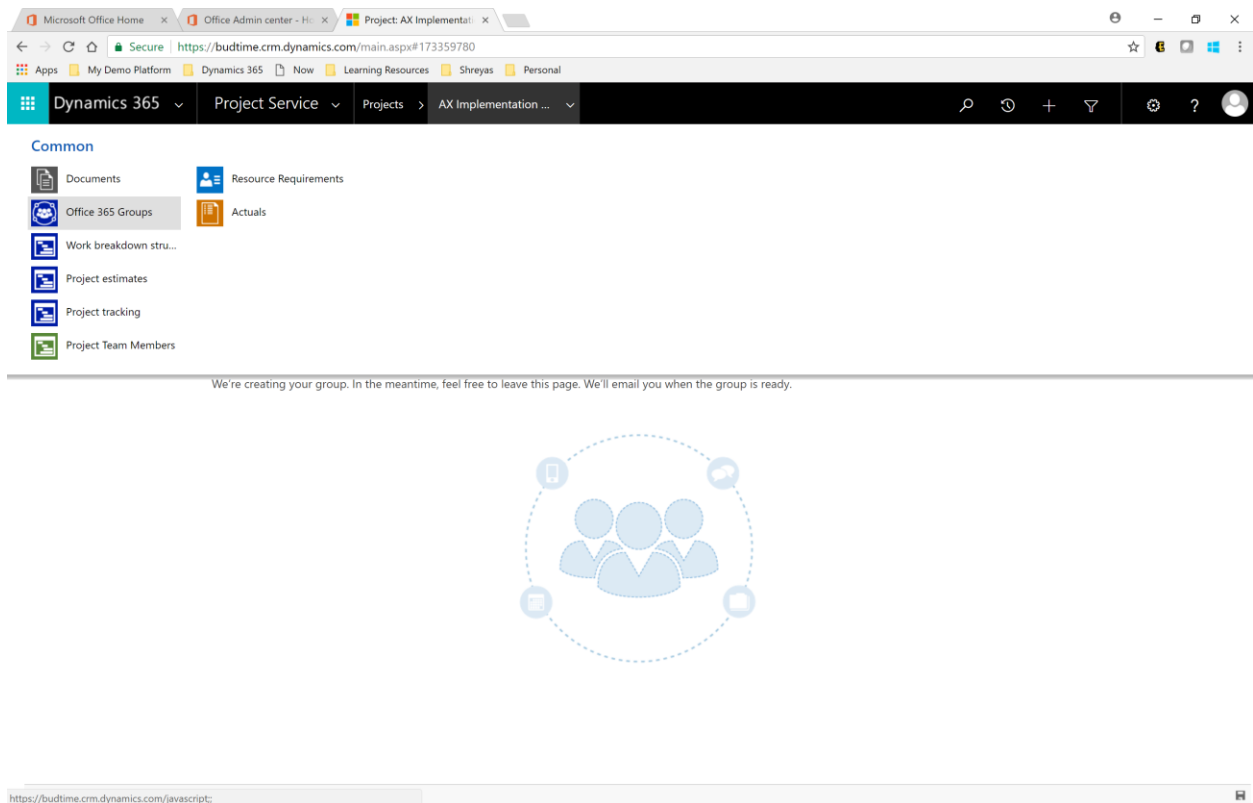
~~ TO BE ADDED LATER ~~

# Office 365 Groups

## Office Groups Setup

1. Install the “Office 365 Groups” solution from the O365 CRM Online Administration Center solutions management page
2. Once the solution installation is complete, in CRMOL, navigate to Settings > Office 365 Groups
  - a. In the “Office 365 Groups Integration Settings” page, click on ‘Add entity’ button to add a new row
  - b. Use the dropdown to choose Opportunity (opportunity entity)
  - c. Then Add another entry for the Project (msdyn\_project) entity
  - d. Click on ‘Publish all’ to publish this customization
3. Once the customizations have been published, navigate to an opportunity record and project record to confirm that the “Office 365 Groups” option shows up in the top navigation menu items

Open the project that you want to collaborate on. Click on the navigation bar and click on Office 365 groups.



The screenshot shows a web browser window with the Dynamics 365 interface. The browser tabs include "Microsoft Office Home", "Office Admin center - H...", and "Project: AX Implementati...". The address bar shows "https://budtime.crm.dynamics.com/main.aspx#173359780". The navigation bar includes "Dynamics 365", "Project Service", "Projects", and "AX Implementation...". The "Common" section lists various entities: Documents, Office 365 Groups, Work breakdown stru..., Project estimates, Project tracking, Project Team Members, Resource Requirements, and Actuals. A message at the bottom of the page reads: "We're creating your group. In the meantime, feel free to leave this page. We'll email you when the group is ready." Below the message is a circular icon representing a group of people.

The screenshot shows the Dynamics 365 Project Service interface for a project named "AX Implementation Project". At the top, there are browser tabs for "Microsoft Office Home", "Office Admin center", and "Project: AX Implementati...". The address bar shows the URL "https://budtime.crm.dynamics.com/main.aspx#173359780". The navigation bar includes "Dynamics 365", "Project Service", "Projects", and "AX Implementation...". A green banner at the top indicates "Your Dynamics 365 trial will expire in 22 day(s)" with a "Buy Now" button.

The main content area is titled "PROJECT: INFORMATION" and "AX Implementation Project". It features a progress bar with stages: "New", "Quote", "Plan (Active for 4 hours)", "Deliver", "Complete", and "Close". Key metrics are displayed: "Due Date: 3/13/2018", "Estimated Cost: \$113,920.00", "Cost Consumption %: 0.00", and "Progress %: 0.00".

Below the progress bar, the "AX Implementation Project" is identified as a "Private Group". The interface is divided into several sections:

- Calendar:** Shows "There are no upcoming meetings for the next 6 months."
- Conversations:** Includes a "Start a group conversation" input field and a message: "The new AX Implementation Project group is ready" from "AX Implementation Project" with the text "Welcome to the AX Implementation Project group. Today at 8:01 PM".
- Notebook:** Contains a table for "Documents" with columns for "Type", "Name", and "Modified".
- Members:** Lists "Sam Surana" as a member.

At the bottom left, the status "Active" is shown.

Here Dynamics 365 users can collaborate with Non-Dynamics 365 users. Non Dynamics 365 users can add or consume content from office 365.



Microsoft Office Home | Office Admin center - H... | Project: AX Implementatio... | GroupMail - Sam@Bud... | Microsoft Corporation [US] | https://outlook.office.com/owa/?realm=187aeb5d-79d2-4094-860d-dd9feb9474c1&path=/group/aximplementationproject@Budtime.onmicrosoft.com/mail

Office 365 | Outlook | Sam Surana

Search AX Implementatio... | AX Implementation Project | Conversations | Files | Calendar | Notebook

AX Implementation Project  
The new AX Implementation Project group. Use...

**The new AX Implementation Project**  
AX Implementation Project.  
Wed 9/6/2017 8:01 PM

**Welcome to the AX Implementation Project group**  
Use the group to share ideas, files, and important dates.

**Start a conversation**  
Read group conversations or start your own.

**Add to the team site**  
Start sharing and collaborating on content in SharePoint.

**Share files**  
View, edit, and share all group files, including email attachments.

**Connect your apps**  
Connect apps like Twitter and Trello to stay current with information and updates your team cares about.

Get the Groups app on your phone and stay connected.

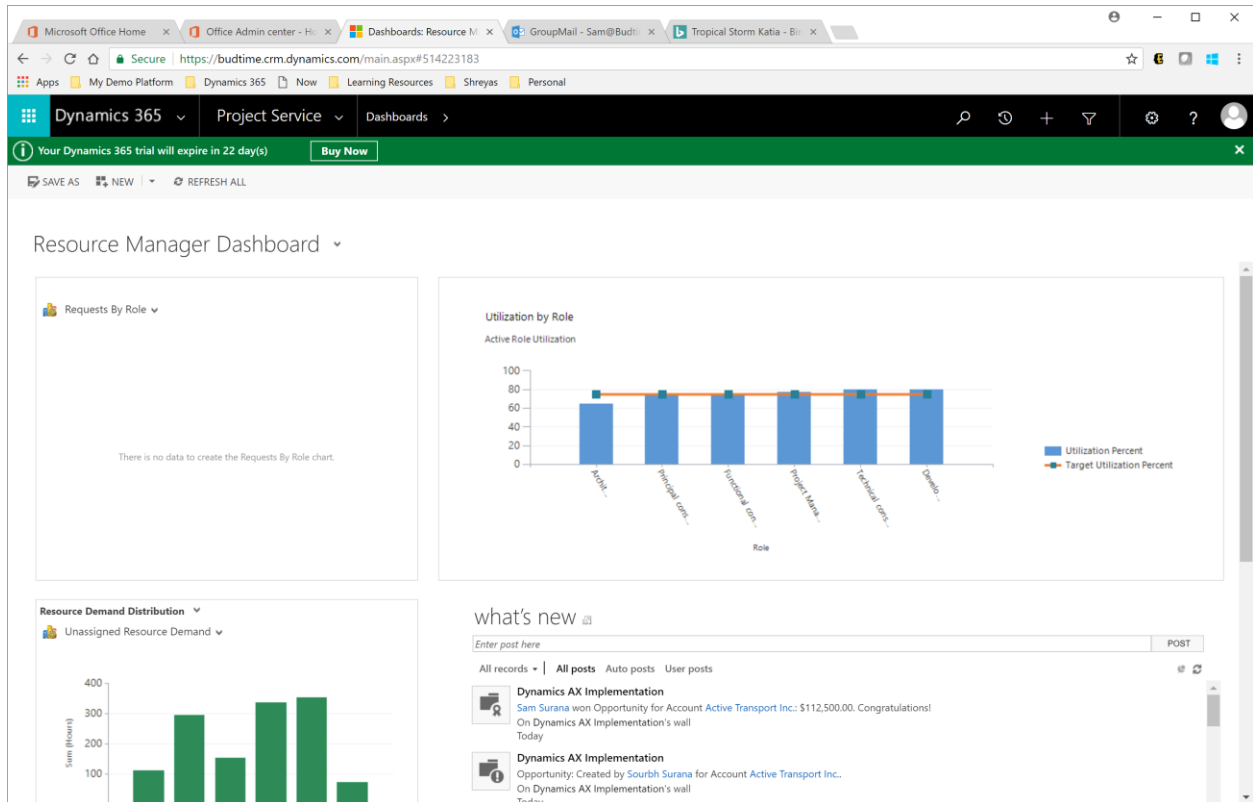
Download on the App Store | GET IT ON Google Play | Get it from Microsoft

**Meet Connectors**  
Get more done with your team by connecting it to your favorite apps through Office 365.  
Got it | Try it

In a public group, anyone in your organization can participate in the group's conversations, files, and calendar. In a private group, only members can participate.  
Learn more

# Resource Management

## Resource Management Dashboard



Go to Project service → Schedule board. This tool gives you ability to see resources.

Microsoft Office Home | Office Admin center - H... | Microsoft Dynamics 365 | GroupMail - Sam@Budt... | Tropical Storm Katia - B...

Secure | https://budtime.crm.dynamics.com/main.aspx#823462013

Apps | My Demo Platform | Dynamics 365 | Now | Learning Resources | Shreyas | Personal

Dynamics 365 | Project Service | Schedule Board

Weekly view | Initial public view

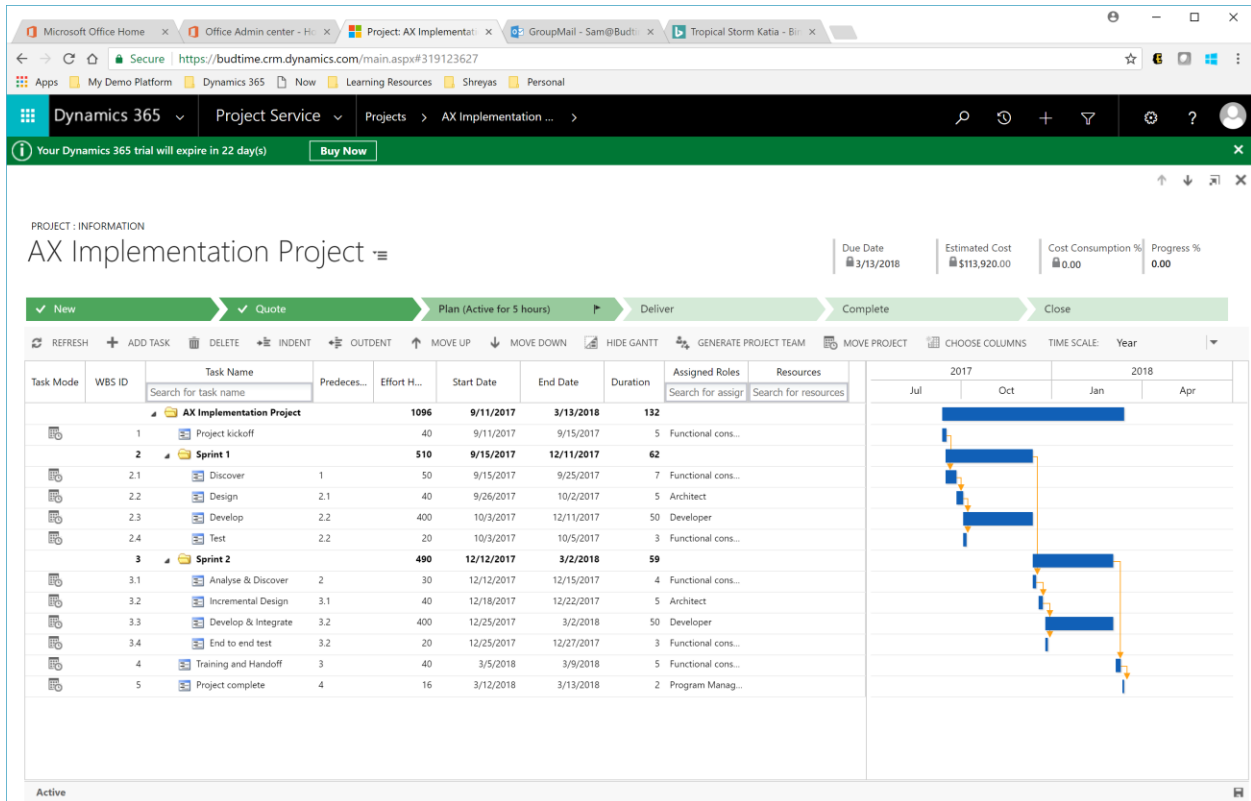
Weeks | View | 9/3/2017 - 1/27/2018 | Book | Actions

Search resources...	September 2017				October 2017				November 2017			
	9/3/2017	9/10/2017	9/17/2017	9/24/2017	10/1/2017	10/8/2017	10/15/2017	10/22/2017	10/29/2017	11/5/2017	11/12/2017	11/19/2017
Abraham McCormi... 0:00 0%												
Alan Steiner (Samp... 0:00 0%												
Allison Dickson 0:00 0%												
Ashley Chinn 0:00 0%												
Bernadette Foley 0:00 0%												
Bob Kozak 240:00 28%			2	40	40	38		12	40	40	28	
Cheri Castaneda 0:00 0%												
Christal Robles 0:00 0%												
Christie Dawson 0:00 0%												
Clarence Desimone 0:00 0%												

1 - 30 of 81

Booking Requirements

Open the AX Implementation Project and go to WBS.



Click on "Generate Project Team". This will generate team with generic resources.

**PROJECT : INFORMATION**  
**AX Implementation Project**

Due Date: 3/13/2018 | Estimated Cost: \$113,920.00 | Cost Consumption %: 0.00 | Progress %: 0.00

Phases: New → Quote → **Plan (Active for 5 hours)** → Deliver → Complete → Close

**Project Team Members Associated View**

Bookable Resource	Role	Position Name	From	To	Required Hou...	Booked Hours	Soft Book	Assigned Hou...	Resource Requirement	Status (Resour...	Applicants avail
Generic Resource	Architect	Architect 1	9/26/2017	12/22/2017	80.00			80.00	AX Implementation Proje...	No	
Generic Resource	Developer	Developer 1	10/3/2017	3/2/2018	800.00			800.00	AX Implementation Proje...	No	
Generic Resource	Functional cons...	Functional cons...	9/11/2017	3/9/2018	150.00			150.00	AX Implementation Proje...	No	
Generic Resource	Functional cons...	Functional cons...	9/15/2017	9/25/2017	50.00			50.00	AX Implementation Proje...	No	
Generic Resource	Program Mana...	Program Mana...	3/12/2018	3/13/2018	16.00			16.00	AX Implementation Proje...	No	
Sourbh Surana	Project Manager		9/11/2017							No	

1 - 6 of 6 | Page 1

Now click on “Hard Book”. This opens Book Resources Dashboard.

Here we can see who is free, compare resources, sort & filter and book the resource.

**Book Resources**  
AX Implementation Pr... Required Capacity: 150 Hours

SEPTEMBER 11 17 24 SEPTEMBER 24 OCTOBER 1 8 15 22 29 NOVEMBER 5 12 19

40 20

Search

< 9/11/2017 - 3/9/2018 > DAY WEEK MONTH

SEPTEMBER 11 17 24 SEPTEMBER 24 OCTOBER 1 8 15 22 29 NOVEMBER 5 12 19

- ✓ Bernadette Foley  
Functional consultant
- ✓ Dianna Woodward  
Functional consultant
- Katelyn Merritt  
Functional consultant
- Katheryn Dickson  
Functional consultant
- Kenya Briggs  
Functional consultant
- Marianne Watson  
Functional consultant
- Tony Sellars  
Functional consultant
- Winifred Pollard  
Functional consultant

**Dianna Woodward**  
Functional consultant  
GMT-08:00

**Skills**

- Agile Methodology
- Budgeting
- CRM
- Inventory Management
- Project Management

**Availability**

100%

**Utilization**

Target 75%

**Cost**

Cost rate	\$120.00
Total cost	\$18,000.00
Bill rate	\$170.00
Revenue generated	\$25,500.00

1 - 8 of 8

Book all the resources based on the relevant filter criteria.

Availability View - Google Chrome

Secure https://budtime.crm.dynamics.com/%7B63640226417000344%7D/WebResources/msdyn/\_Resource/AvailabilityView/GenericResourceAssignment/AvailabilityView.htm?Data=%7B%22name%3A%22AX%20Implementation%20Project...

BOOK SORT VIEW FILTER OPTIONS

### Filters

- Organizational Units
  - Select Organizational Units
  - Contoso US
- Business Units
  - Select Business Units
- Resource Types
  - Select Resource Types
  - Contact
  - User
- Teams
  - Select Teams
- Roles
  - Select Roles
  - Program Manager
- Skills
  - Select Skills
- Match Resources Using
  - Skills in Profile

RESET APPLY

## Book Resources

AX Implementation Pr... Required Capacity: 16 Hours

MARCH 12 16

Search < 3/12/2018 - 3/13/2018 > DAY WEEK MONTH

	MARCH 12
✓ Ashley Chinn Program Manager	
Janna Santana Program Manager	
Jay Orth Program Manager	

Processing, please wait...

1 - 3 of 3

I have booked them as follows.

The screenshot displays the Microsoft Dynamics 365 Project Service interface. At the top, the browser address bar shows the URL <https://budtime.crm.dynamics.com/main.aspx#605985171>. The navigation pane on the left includes 'Dynamics 365', 'Project Service', and 'Projects > AX Implementation ...'. A green banner at the top indicates 'Your Dynamics 365 trial will expire in 22 day(s)' with a 'Buy Now' button. Below this, a toolbar contains options like 'NEW PROJECT', 'CREATE TEMPLATE', 'OPEN IN MS PROJECT', 'BOOK', 'DELETE', 'PROCESS', 'ASSIGN', 'SHARE', and 'EMAIL A LINK'. The main content area is titled 'PROJECT: INFORMATION' and 'AX Implementation Project'. It shows key metrics: Due Date (3/13/2018), Estimated Cost (\$113,920.00), Cost Consumption % (0.00), and Progress % (0.00). A progress bar below these metrics shows stages: New, Quote, Plan (Active for 16 hours), Deliver, Complete, and Close. The 'Project Team Members Associated View' is displayed, featuring a search bar and a table of resources. The table has columns for Bookable Resource, Role, Position Name, From, To, Required Hours, Booked Hours, Soft Book, Assigned Hours, Resource Requirement, Status (Resource), and Applicants available. The table lists seven resources, with Dianna Woodward highlighted in blue. At the bottom, there is a '1 - 7 of 7' indicator and a 'Page 1' navigation control.

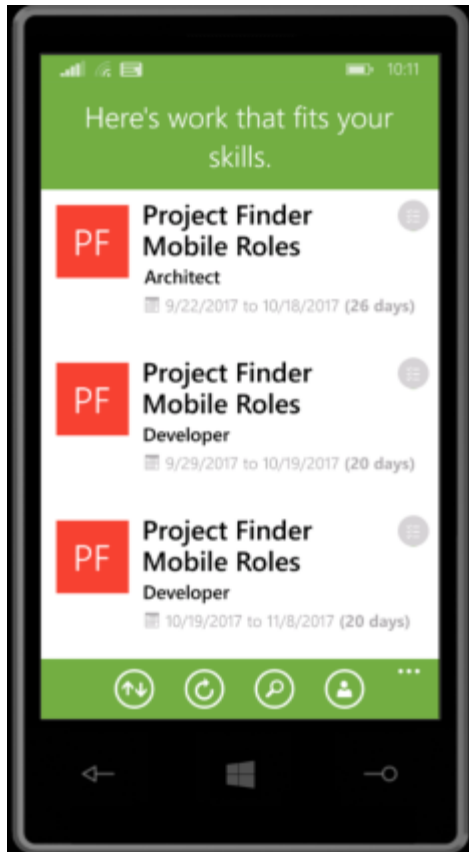
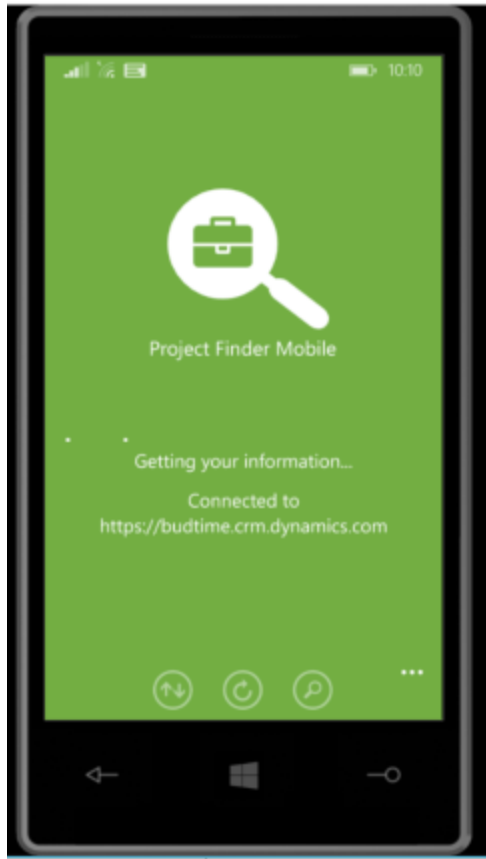
Bookable Resource	Role	Position Name	From	To	Required Hou...	Booked Hours	Soft Book	Assigned Hou...	Resource Requirement	Status (Resour...)	Applicants availab
Alan Steiner (Sample Data)	Project Manager		9/11/2017	3/13/2018	200.00					No	
Ashley Chinn	Program Mana...		3/12/2018	3/13/2018	16.00			16.00		No	
Bernadette Foley	Functional cons...		9/11/2017	3/9/2018	150.00			150.00		No	
Davis Flourmoy	Architect		9/26/2017	12/22/2017	80.00			80.00		No	
Dianna Woodward	Functional cons...		9/15/2017	9/25/2017	50.00			50.00		No	
Faith Charles	Developer		10/3/2017	3/2/2018	800.00			800.00		No	
Sourbh Surana	Project Manager		9/11/2017							No	

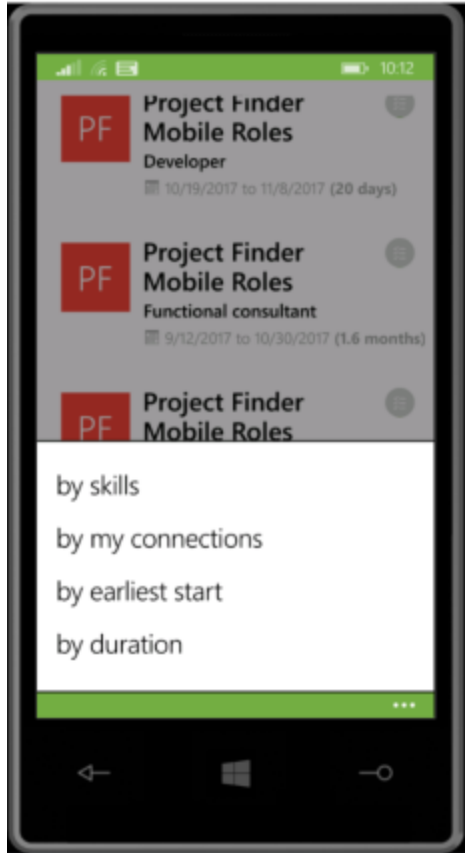
Now I want to see if Functional consultant Dianna's booking is correct or not. I can then click on the "Maintain Booking" and make some adjustments.

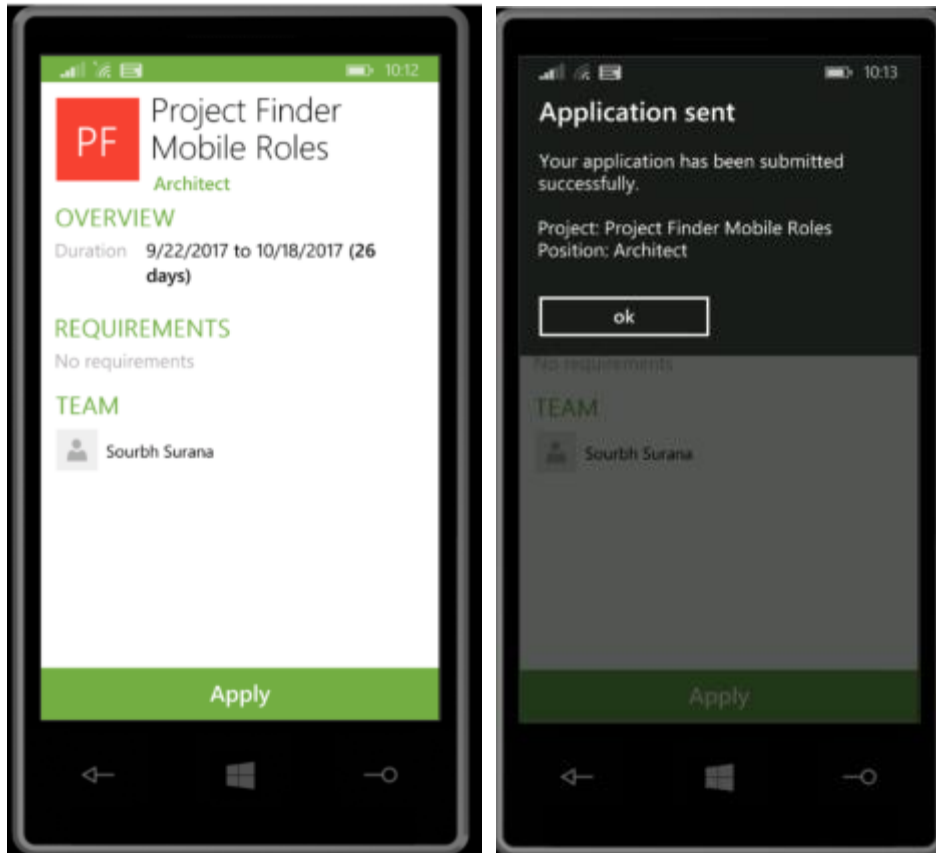




An applicant can use “Project Finder mobile app” to apply for the Job based on skill, connections, earliest start etc. The application is then routed to the project manager for approval. Once the project manager approves it the applicant becomes the part of the team. The project finder mobile app is available for android, iOS and windows.







## Resource Utilization

Click on Project service → Resource Utilization to see the utilization of the resources

**Filters**

Organizational Units  
Select Organizational Units

Business Units  
Select Business Units  
budtime

Resource Types  
Select Resource Types  
Contact  
User

Teams  
Select Teams

Roles  
Select Roles

Skills  
Select Skills

RESET APPLY

FILTER 3 OPTIONS

## Resource Utilization

Search

< 6/4/2017 - 9/10/2017 > DAY WEEK MONTH

	JUNE 4	JUNE 11	JUNE 18	JUNE 25	JULY 2	JULY 9	JULY 16	JULY 23	JULY 30	AUGUST 6	AUGUST 13	AUGUST 20
Abraham McCor... Functional consultant	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Alan Steiner (Sa... Project Manager	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Allison Dickson Technical consultant	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Ashley Chinn Program Manager	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Bernadette Foley Functional consultant	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Bob Kozak Developer	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Cheri Castaneda Technical consultant	75%	125%	75%	75%	75%	75%	25%	25%	25%	25%	25%	25%
Christal Robles Technical consultant	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Christie Dawson Technical consultant	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Clarence Desim... Technical consultant	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Davis Flournoy Architect	125%	100%	100%	100%	75%	75%	50%	50%	25%	40%	42%	45%
Dawn Phelps Functional consultant	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Dianna Woodwa... Functional consultant	62%	62%	62%	62%	37%	37%	37%	37%	0%	0%	0%	0%
Dick Cowlev												

# Time and Expense Approval

Here you can record and modify Time Entry.

## Time Entry

Click on Project Service → My Work → Time Entries then click on the + sign below the day you want to enter the time for.

The screenshot displays the Microsoft Dynamics 365 interface for Time Entries. The browser address bar shows the URL <https://budtime.crm.dynamics.com/main.aspx#462022826>. The navigation pane includes 'Dynamics 365', 'Project Service', and 'Time Entries'. The main area shows a calendar grid for the week of September 10 to September 16, 2017. A 'Time Entry' modal form is open, allowing users to record time for a specific date. The form fields are as follows:

Field	Value
Date	9/11/2017
Duration	02:00
Type	Work
Project	AX Implementation Project
Project Task	Project kickoff
Role	Project Manager
Internal Comments	Project manager was not available
External Comments	

At the bottom of the modal, there are 'Save' and 'Cancel' buttons. The calendar grid below the modal shows a grid of days from Sunday, 9/10 to Saturday, 9/16, with a '+' sign in the bottom right corner of each day's cell.

Once you click on save here is how it look. The colors are chosen by system so your colors may look different. You can also change the calendar view.

The screenshot shows the Microsoft Dynamics 365 interface for Time Entries. The browser address bar shows the URL: <https://budtime.crm.dynamics.com/main.aspx#462022826>. The navigation pane includes 'Dynamics 365', 'Project Service', and 'Time Entries'. The main area displays a grid view for the week of September 10 - September 16, 2017. The grid has columns for each day from Sunday, 9/10 to Saturday, 9/16, and rows for hours from 1 to 18. A time entry is visible on Monday, 9/11, at 2:00. The entry is titled 'AX Implementation Project' and has a status of 'Draft'. The description reads 'Project manager was not available'. There are plus signs in the bottom right corner of each cell in the grid, indicating that more time entries can be added.

	Sun, 9/10	Mon, 9/11	Tue, 9/12	Wed, 9/13	Thu, 9/14	Fri, 9/15	Sat, 9/16
18							
17							
16							
15							
14							
13							
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2		<b>AX Implementation Project</b> Project manager was not available 2:00 Draft					
1							

Now you can hit submit to submit the Time entry for approval.

The screenshot shows the Microsoft Dynamics 365 Time Entries interface. The main view is a calendar for the week of September 10-16, 2017. A modal window is open, displaying the details of a time entry for 9/11/2017. The entry is for a 'Work' type, with a duration of 02:00, under the 'AX Implementation Project' and 'Project kickoff' task. The status is 'Draft'. A summary table and a pie chart are also visible in the modal.

Type	Entries	Hours
Work	1	2:00
<b>Grand Total</b>	<b>1</b>	<b>2:00</b>

The pie chart shows a single green slice representing 2:00 hours.

Project manager can now look at the entries and approve the entry.

Click on Project Service → Project Approvals. Here you should be able to see previously submitted entry. Open it up and now click on approve.



### Time Entries for Approval

Search for records

Project	Project Task	Date	Time Entry	Submitted By	Resource	Resource Role	Billing Type	Submitted (hrs)	Billable (hrs)	External Comments
AX Implementation P...	Project kickoff	9/11/2017	Project manager...	Sourbh Surana	Sourbh Surana	Project Manager	Chargeable	2.00	2.00	

1 - 1 of 1 (0 selected)

All # A B C D E F G H I J K L M N O P Q R S T U V

The screenshot shows a web browser window with the URL <https://budtime.crm.dynamics.com/main.aspx#590767354>. The page title is "PROJECT APPROVAL : INFORMATION" and the main heading is "Sourbh Surana - Time Entry". The page is divided into two main sections: "General" and "Details".

**General Section:**

- Billing Type: Chargeable
- Submitted (hrs): 2.00
- Billable (hrs): 2.00
- Time Entry: Project manager was not available
- External Comments: --
- Submitted By: Sourbh Surana

**Details Section:**

- Time Entry**
- Date: 9/11/2017
- Duration: 2 hours
- Project: AX Implementation Project
- Project Task: Project Kickoff
- Description: Project manager was not available
- Role: Project Manager
- Type: Work

At the bottom of the page, there is a status bar that says "Active".

## Expense Entry

Click on Project Service → My Work → Project Approvals then click on the + sign below the day you want to enter the time for.

On the screen fill in all the details. You can also add the receipt here by clicking "Add Receipt".

The screenshot displays the Microsoft Dynamics 365 Expenses interface. At the top, the browser address bar shows the URL <https://budtime.crm.dynamics.com/main.aspx#58225318>. The navigation pane includes 'Dynamics 365', 'Project Service', and 'Expenses'. The main area shows a calendar for 'September 10 - September 16, 2017'. A modal dialog titled 'New expense: 9/11/2017' is open, containing the following fields:

- Expense Purpose: International Call
- Amount: 30.00
- Sales Tax: 0.00
- Currency: US Dollar (USD)
- Project: AX Implementation Project (with a 'Show all Projects' checkbox)
- Category: Phone
- External Comments: Had to call offshore team
- Receipts: No receipt is available for this expense.
- Status: Draft

At the bottom of the modal are 'Add receipt', 'Save', and 'Cancel' buttons. In the background, a teal cell in the calendar grid for 9/11/2017 displays '\$0.00', 'Phone', and 'Draft'.

Here is how the expense entry will look like when you save. The colors are chosen by system so your colors may look different.

Sun, 9/10	Mon, 9/11	Tue, 9/12	Wed, 9/13	Thu, 9/14	Fri, 9/15	Sat, 9/16
	<p style="text-align: center;">+</p> <p><b>\$30.00</b> International Call AX Implementation Project Phone Draft</p>					
+		+	+	+	+	+

Now click on submit

The screenshot shows the Microsoft Dynamics 365 interface for managing expenses. A modal window is open for the date range September 10 - September 16, 2017. The main table lists the following expense entry:

Date	Project	Category	Expense Purpose	Amount
9/11/2017	AX Implementation Project	Phone	International Call	30.00

Below the table is a 'Note' field. To the right, a 'Chart' section displays a pie chart representing the total expense amount of \$30.00. A summary table is also present:

Status	Expenses	Amount
Expenses	1	\$30.00
<b>Total</b>	<b>1</b>	<b>\$30.00</b>

At the bottom of the modal, there are 'Submit' and 'Cancel' buttons. The background shows a calendar view with a blue bar indicating the expense entry for \$30.00 on 9/11/2017.

All these time and expense entries can be submitted via tablet or mobile also.

Now a project manager can approve the expenses. Click on Project Service → Project Approvals. Now change the view to Expense Entries for Approvals.

### Expense Entries for Approval

Search for records

- System Views
- Absences/Vacations for Approval
- Expense Entries for Approval
- My Past Approvals
- Non-Project Expenses for Approval
- Non-Project Time Entries for Approval
- Processing Approvals
- Time Entries for Approval
- Create Personal View
- Save Filters as New View
- Save Filters to Current View

Submitted By	Resource	Expense Entry	Billing Type	Sales Price	Has Receipt	External Comments
Sh Surana	Sourbh Surana	International Call	Not Available	\$0.00	Yes	Had to call offshore t...

1 - 1 of 1 (0 selected)

All # A B C D E F G H I J K L M N O P Q R S T U V

Microsoft Office Home x Dynamics 365 x Project Approval: Sourbh x Bing x

Secure | https://budtime.crm.dynamics.com/main.aspx#285886149

Apps My Demo Platform Dynamics 365 Now Learning Resources Shreyas Personal

Dynamics 365 Project Service Project Approvals Sourbh Surana - Exp...

Your Dynamics 365 trial will expire in 18 day(s) Buy Now

APPROVE REJECT GO TO RECEIPTS FORM EDITOR

PROJECT APPROVAL - INFORMATION

# Sourbh Surana - Expense

Owner Sourbh Surana

## General

Billing Type	Not Available
Sales Price	\$0.00
Has Receipt	Yes
Expense Entry	International Call
External Comments	Had to call offshore team
Submitted By *	Sourbh Surana

## Details

### Expense Entry

Transaction Date *	9/11/2017
External Description	Had to call offshore team
Amount *	\$30.00
Sales tax amount +	\$0.00
Total Amount	\$30.00
Currency	US Dollar
Project	AX Implementation Project
Expense Category	Phone

Active

Project manager can now click on the Approve to approve the expense.

# Project Tracking

Open the desired project and from the navigation bar click on the “Project Tracking” view.

The screenshot displays the Dynamics 365 Project Tracking interface. At the top, the navigation bar shows 'Dynamics 365', 'Project Service', 'Projects', and 'AX Implementation...'. Below this is a 'Common' section with various icons for Documents, Resource Requirements, Office 365 Groups, Actuals, Work breakdown structure, Project estimates, Project tracking (highlighted), and Project Team Members.

The main view is titled 'Effort Tracking' and shows a Gantt chart on the right and a data table on the left. The Gantt chart displays project progress from July 2017 to April 2018. The data table provides a detailed breakdown of tasks, including their WBS ID, Task Name, Effort Hours, Remaining hours, Progress %, Actual Hours, Effort Estimate, and Schedule Variance.

WBS ID	Task Name	Effort Hours	Remaining...	Progress %	Actual Hou...	Effort Esti...	Schedule V...
	<b>AX Implementation Project</b>	<b>1096</b>	<b>1,094</b>	<b>0.00</b>	<b>2</b>	<b>1,096</b>	<b>0</b>
1	Project kickoff	40	38	5.00	2	40	0
2	<b>Sprint 1</b>	<b>510</b>	<b>510</b>	<b>0.00</b>	<b>0</b>	<b>510</b>	<b>0</b>
2.1	Discover	50	50	0.00	0	50	0
2.2	Design	40	40	0.00	0	40	0
2.3	Develop	400	400	0.00	0	400	0
2.4	Test	20	20	0.00	0	20	0
3	<b>Sprint 2</b>	<b>490</b>	<b>490</b>	<b>0.00</b>	<b>0</b>	<b>490</b>	<b>0</b>
3.1	Analyse & Discover	30	30	0.00	0	30	0
3.2	Incremental Design	40	40	0.00	0	40	0
3.3	Develop & Integrate	400	400	0.00	0	400	0
3.4	End to end test	20	20	0.00	0	20	0
4	Training and Handoff	40	40	0.00	0	40	0
5	Project complete	16	16	0.00	0	16	0

Here you can toggle between effort tracking and the cost tracking to see the progress of the project by effort and cost.



Microsoft Office Home | Project: AX Implementa... | Bing

Secure | https://budtime.crm.dynamics.com/main.aspx#86025632

Apps | My Demo Platform | Dynamics 365 | Now | Learning Resources | Shreyas | Personal

Dynamics 365 | Project Service | Projects | AX Implementation ...

Your Dynamics 365 trial will expire in 17 day(s) | Buy Now

NEW PROJECT | CREATE TEMPLATE | OPEN IN MS PROJECT | BOOK | DELETE | PROCESS | ASSIGN | SHARE | EMAIL A LINK

PROJECT: INFORMATION

## AX Implementation Project

Due Date: 3/13/2018 | Estimated Cost: \$113,920.00 | Cost Consumption %: 0.21 | Progress %: 0.18

New | Quote | Plan | Deliver (Active for 1 minute) | Complete | Close

Cost Tracking | Use Cost Rate | REFRESH | CHOOSE COLUMNS

Task Name	Planned Cost	Remaining Cost (ETC)	Cost Estimate at Complete (...)	Actual Cost	Cost Consumption %	Cost Variance
<b>AX Implementation Project</b>	<b>\$113,920.00</b>	<b>\$113,680.00</b>	<b>\$113,920.00</b>	<b>\$240.00</b>	<b>0.21</b>	<b>\$0.00</b>
1 Project kickoff	\$4,800.00	\$4,560.00	\$4,800.00	\$240.00	5.00	\$0.00
<b>2 Sprint 1</b>	<b>\$52,400.00</b>	<b>\$52,400.00</b>	<b>\$52,400.00</b>	<b>\$0.00</b>	<b>0.00</b>	<b>\$0.00</b>
2.1 Discover	\$6,000.00	\$6,000.00	\$6,000.00	\$0.00	0.00	\$0.00
2.2 Design	\$4,000.00	\$4,000.00	\$4,000.00	\$0.00	0.00	\$0.00
2.3 Develop	\$40,000.00	\$40,000.00	\$40,000.00	\$0.00	0.00	\$0.00
2.4 Test	\$2,400.00	\$2,400.00	\$2,400.00	\$0.00	0.00	\$0.00
<b>3 Sprint 2</b>	<b>\$50,000.00</b>	<b>\$50,000.00</b>	<b>\$50,000.00</b>	<b>\$0.00</b>	<b>0.00</b>	<b>\$0.00</b>
3.1 Analyse & Discover	\$3,600.00	\$3,600.00	\$3,600.00	\$0.00	0.00	\$0.00
3.2 Incremental Design	\$4,000.00	\$4,000.00	\$4,000.00	\$0.00	0.00	\$0.00
3.3 Develop & Integrate	\$40,000.00	\$40,000.00	\$40,000.00	\$0.00	0.00	\$0.00
3.4 End to end test	\$2,400.00	\$2,400.00	\$2,400.00	\$0.00	0.00	\$0.00
4 Training and Handoff	\$4,800.00	\$4,800.00	\$4,800.00	\$0.00	0.00	\$0.00
5 Project complete	\$1,920.00	\$1,920.00	\$1,920.00	\$0.00	0.00	\$0.00

Active

The overall project status can be got from the Project record → Status Tab.

PROJECT: INFORMATION

# AX Implementation Project

Due Date	Estimated Cost	Cost Consumption %	Progress %
3/13/2018	\$113,920.00	0.21	0.18

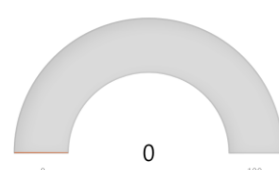
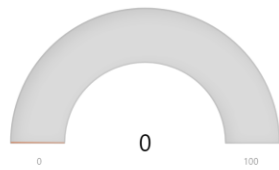


## Status

Overall Project Status: **Yellow**  
Comments: **There are some risks that need to resolved.**

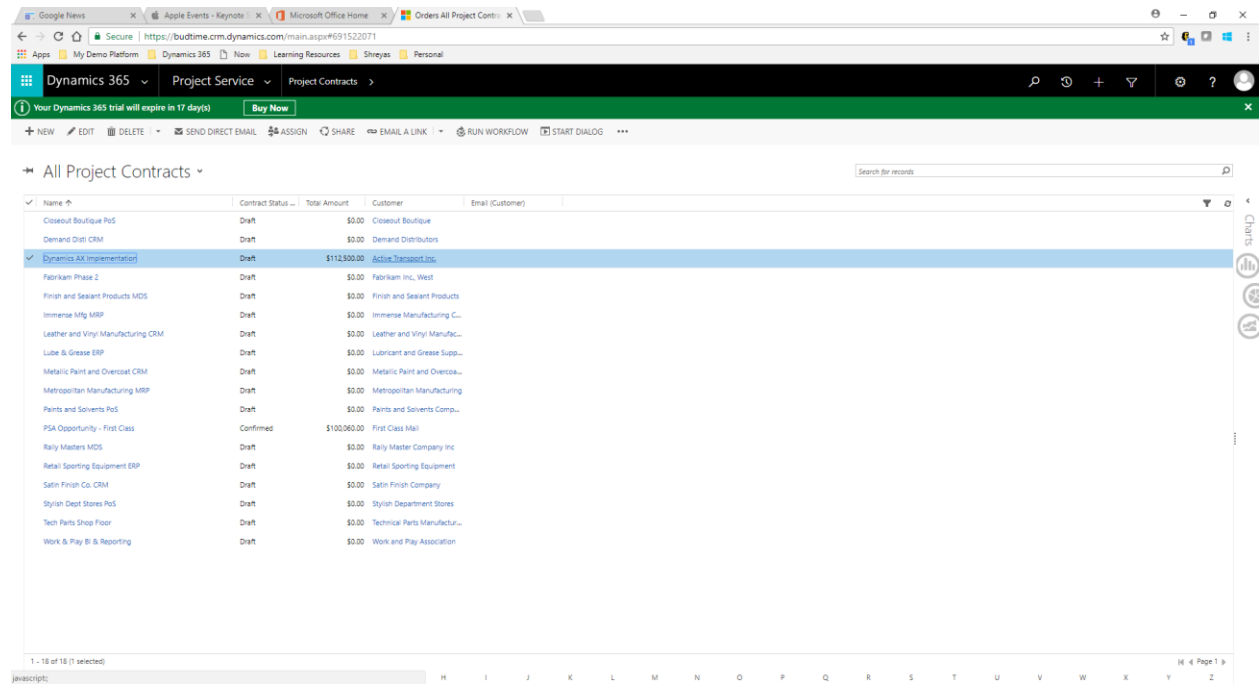
Schedule Performance: **On Time**  
Cost Performance: **On Budget**

Status Updated On: 9/12/2017 6:38 PM

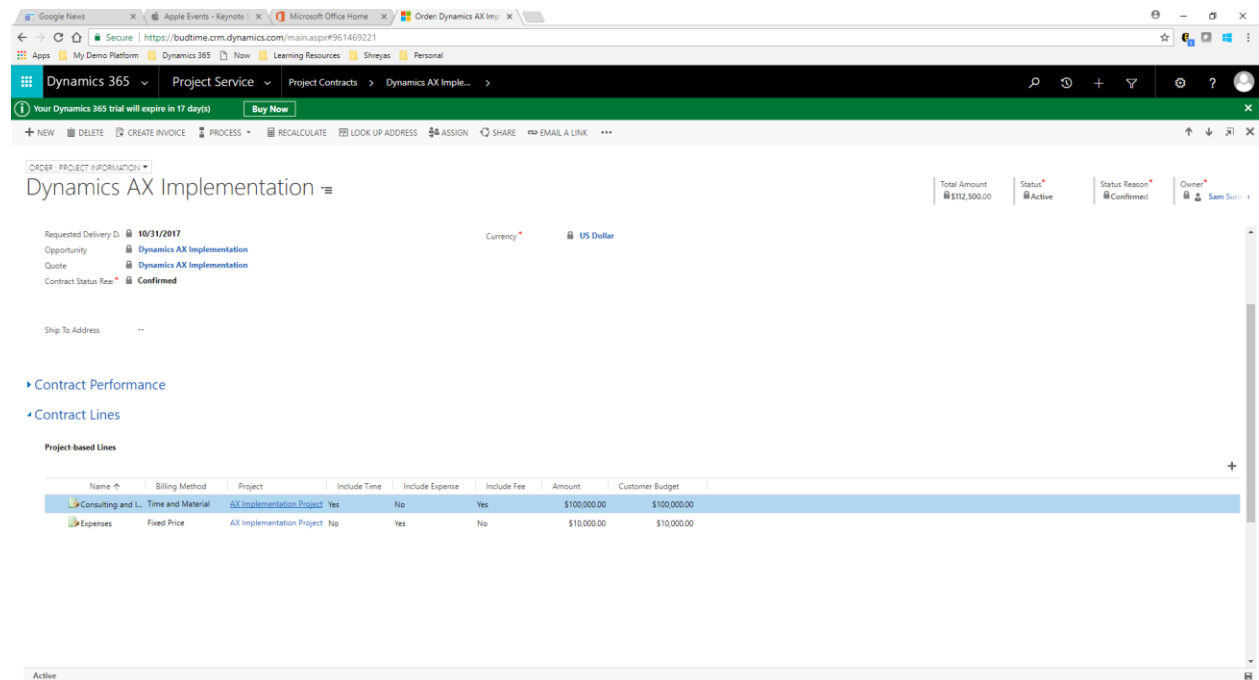


# Project Billing

Navigate to Project Service → Project Contracts and open the Dynamics AX implementation contract.



Here you can review the contract lines on which project based lines are used for kind of transactions and also have billing methods for the contract line. You can also review the contract performance here.



Lets open the first contract line “Consulting and Implementation”. Here you can see the details of the project contract lines.

The screenshot shows the Dynamics 365 interface for a contract line. The title is "Consulting and Implementation Work".

**General**

- Name: Consulting and Implementation Work
- Billing Method: Time and Material
- Project: AX Implementation Project
- Include Time: Yes
- Include Expense: No
- Include Fee: Yes
- Contracted Amount: \$100,000.00
- Estimated Tax: \$0.00
- Contracted Amount A: \$100,000.00
- Customer Budget: \$100,000.00
- Invoice Frequency: BiMonthly
- Billing Start Date: --

**Project Contract Line Details**

Group By: (no grouping)

Description	Billing Type	Transaction Class	Resourcing Unit	Transaction	Role	Start Date	End Date	Quantity	Unit	Price	Tax	Amount	Price (Orig.)	Amount L.	Origin	Pr
Architect	Chargeable	Time	Contoso US	---	Architect	9/6/2017	9/6/2017	200.00	Hour	\$150.00	---	\$30,000.00	\$100.00	\$30,000.00	Architect	05
CRM Online Enterprise	Chargeable	Material	Contoso US	---	---	9/5/2017	9/5/2017	1.00	Administrativ...	\$60.00	---	\$60.00	\$50.00	\$50.00	CRM Online Enter...	27
Developer	Chargeable	Time	Contoso US	---	Developer	9/6/2017	9/30/2017	200.00	Hour	\$150.00	---	\$30,000.00	\$100.00	\$30,000.00	Developer	05
Dynamics AX Licenses	Chargeable	Material	Contoso US	---	---	9/6/2017	9/6/2017	50.00	Standard User	\$30.00	---	\$2,500.00	\$30.00	\$1,500.00	Dynamics AX Lic...	71
Project Manager	Chargeable	Time	Contoso US	---	Project Mana...	9/6/2017	9/6/2017	200.00	Hour	\$200.00	---	\$40,000.00	\$120.00	\$24,000.00	Project Manager	05
Trips	Chargeable	Expense	Contoso US	---	---	9/6/2017	9/6/2017	10.00	Primary Unit	\$1,000.00	---	\$10,000.00	\$1,000.00	\$10,000.00	Trips	04

Lets open the next contract line “Expenses” and create a few milestones. After the record opens, you can click “Generate periodic milestones” for system to generate the milestones or the milestones can be manually created.

Order Line: New Order Line - Google Chrome

Secure | https://budtime.crm.dynamics.com/main.aspx?etc=1089&extraqs=%3f.CreateFromId%3d%257b83D866AD-5693-E711-8103-5065F38851F1%257d%26.CreateFromType%3d1088%26.gridType%3d1089%26etc-%3d1089%26id%3

Dynamics 365 | New Order Line

OPEN COST DETAIL | DELETE CONTRACT DETAILS | DELETE | IMPORT FROM PROJECT E... | GENERATE PERIODIC MILE... | EDIT PROPERTIES | EMAIL A LINK | RUN WORKFLOW | START DIALOG

ORDER LINE : PROJECT INFORMATION

## Expenses

**The sum of the amount in billing milestones, 30000, must be equal to the line amount 10000.**

**General**

Name	<b>Expenses</b>	Include Time	<b>No</b>	Contracted Amount	<b>\$10,000.00</b>
Billing Method	<b>Fixed Price</b>	Include Expense	<b>Yes</b>	Estimated Tax	<b>\$0.00</b>
Project	<b>AX Implementation Project</b>	Include Fee	<b>No</b>	Contracted Amount A	<b>\$10,000.00</b>
				Customer Budget	<b>\$10,000.00</b>
				Invoice Frequency	<b>BiMonthly</b>
				Billing Start Date	<b>--</b>

**Project Contract Line Details**

**Invoice Schedule**

Milestone Name	Project Task	Milestone Date	Milestone Amount	Invoice Status
Initial 30% milestone	Analyse & Discover	9/30/2017	\$30,000.00	Not Ready for invoicing

To see the Actuals, click on navigation bar and click "Actuals". Here you should be able to see everything that was approved for the project.

ORDER: PROJECT INFORMATION

## Dynamics AX Implementation

Total Amount: \$112,500.00 | Status: Active | Status Reason: Confirmed | Owner: Sam Sur...

Actual Associated View

CHART PANE | RUN REPORT | EXCEL TEMPLATES | EXPORT ACTUALS

Transaction Ty...	Transaction Cl...	Adjustment St...	Document Da...	Start Date/Ti...	End Date/Time	Project ID ↑	Task ID	Transaction ca...	Contracting U...	Resourcing U...	Quantity	Unit of measu...	Price
Cost	Time		9/11/2017	9/11/2017 5:00 ...	9/11/2017 5:00 ...	AX Implementa...	Project kickoff	Contoso US	1201708230421...	1201708230421...	2.00	Hour	\$120.00
Unbilled Sales	Time		9/11/2017	9/11/2017 5:00 ...	9/11/2017 5:00 ...	AX Implementa...	Project kickoff	Contoso US	1201708230421...	1201708230421...	2.00	Hour	\$200.00
Resourcing Unit...	Time		9/11/2017	9/11/2017 5:00 ...	9/11/2017 5:00 ...	AX Implementa...	Project kickoff	1201708230421...	1201708230421...	1201708230421...	2.00	Hour	\$120.00
Inter-Organizati...	Time		9/11/2017	9/11/2017 5:00 ...	9/11/2017 5:00 ...	AX Implementa...	Project kickoff	1201708230421...	1201708230421...	1201708230421...	2.00	Hour	\$120.00

1 - 4 of 4 | Page 1

Active

Now for the billing.

In order to bill a milestone we need to manually make the milestone ready for billing prior to generating an invoice. We can view all the project milestones by going to Project Service → Project contract milestones. Open the contract milestones and change the status to ready of invoicing.

Project Contract Milestones

Milestone Name	Milestone Date	Milestone Amou...	Invoice Status	Project Contract Line Descr...	Project Contract
Initial 30% miles...	9/30/2017	\$30,000.00	Not Ready for in...	Expenses	Dynamics AX Implem...

1 - 1 of 1 (0 selected)

All # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Now we can go to the contract and click on button, create invoice.

The screenshot displays the Microsoft Dynamics 365 Project Service interface for an invoice titled "Dynamics AX Implementation". The interface includes a navigation bar at the top with "Dynamics 365", "Project Service", and "Project Contracts" menus. A green banner at the top indicates a trial expiration notice. Below the navigation bar, a toolbar contains actions like "NEW", "DELETE", "CREATE INVOICE", "PROCESS", "RECALCULATE", "LOOK UP ADDRESS", "ASSIGN", "SHARE", and "EMAIL A LINK".

The main content area shows the invoice details:

- ORDER: PROJECT INFORMATION** dropdown menu.
- Dynamics AX Implementation** title.
- Total Amount:** \$112,500.00
- Status:** Active
- Status Reason:** Confirmed
- Owner:** Sam Surana

The **Summary** section is expanded, showing the following details:

- ID:** ORD-00019-V2Z6J2
- Name:** Dynamics AX Implementation
- Customer:** Active Transport Inc.
- Account Manager:** Sam Surana
- Contracting Unit:** Contoso US
- Product Price List:** US Bill Rates 2016
- Requested Delivery D.:** 10/31/2017
- Opportunity:** Dynamics AX Implementation
- Quote:** Dynamics AX Implementation
- Contract Status Reason:** Confirmed

The **BILLING AND PRINT SETUP** section includes:

- Bill To Address:** 225200 Miles Ave., Bellevue, WA 98007 USA
- Bill To Contact Name:** --
- Payment Terms:** Net 30
- Currency:** US Dollar

The **ACTIVITIES NOTES** section shows a list of activities with options to "Add Photo" and "Add Task". A message below states: "We didn't find any activity records."

Below the summary, there are sections for **Contract Performance** and **Contract Lines**. The **Contract Lines** section is currently empty, showing only a "Project-based Lines" header and a plus sign to expand.

At the bottom of the page, the status "Active" is displayed.

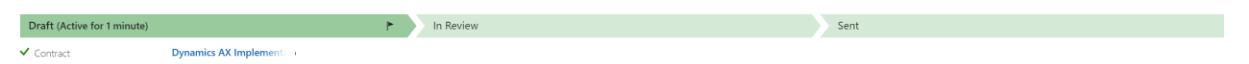
This creates an invoice which can then be reviewed and sent. You can look at each of the invoice lines and change the quantity or add a new time, expense or fee based on the rules specified in the contract line.



INVOICE: PROJECT INVOICE

# Dynamics AX Implementation

Total Amount: \$32,900.00 | Status: Active | Project Invoice Status: Draft | Owner: Sam Surani



Contract: Dynamics AX Implement... | Invoice Process (Active for 1 minute) | Next Stage

## Summary

Invoice ID: INV-00000-Y0DSL3  
 Name: Dynamics AX Implementation  
 Currency: US Dollar  
 Price List: US Bill Rates 2016  
 Payment Terms: Net 30

Bill To Address: 225200 Miles Ave, Bellevue, WA 98007, USA

Opportunity: Dynamics AX Implementation  
 Contract: Dynamics AX Implementation  
 Customer: Active Transport Inc.

### Project-based Lines

Name	Project	Billing Method	Contract Line Amount	Amount Previously...	Amount
Consulting and Implemen...	AX Implementation Project	Time and Mater...	\$100,000.00	\$0.00	\$400.00
Expenses	AX Implementation Project	Fixed Price	\$10,000.00	\$0.00	\$30,000.00

### PRODUCTS

Product Name	Delivered On	Quantity	Unit	Price Per Unit	Extended Amount
Dynamics AX Licenses	9/6/2017	50.00000	Standard User	\$50.00	\$2,500.00

Active

# Reporting and Analysis

## Traditional Structured Reports

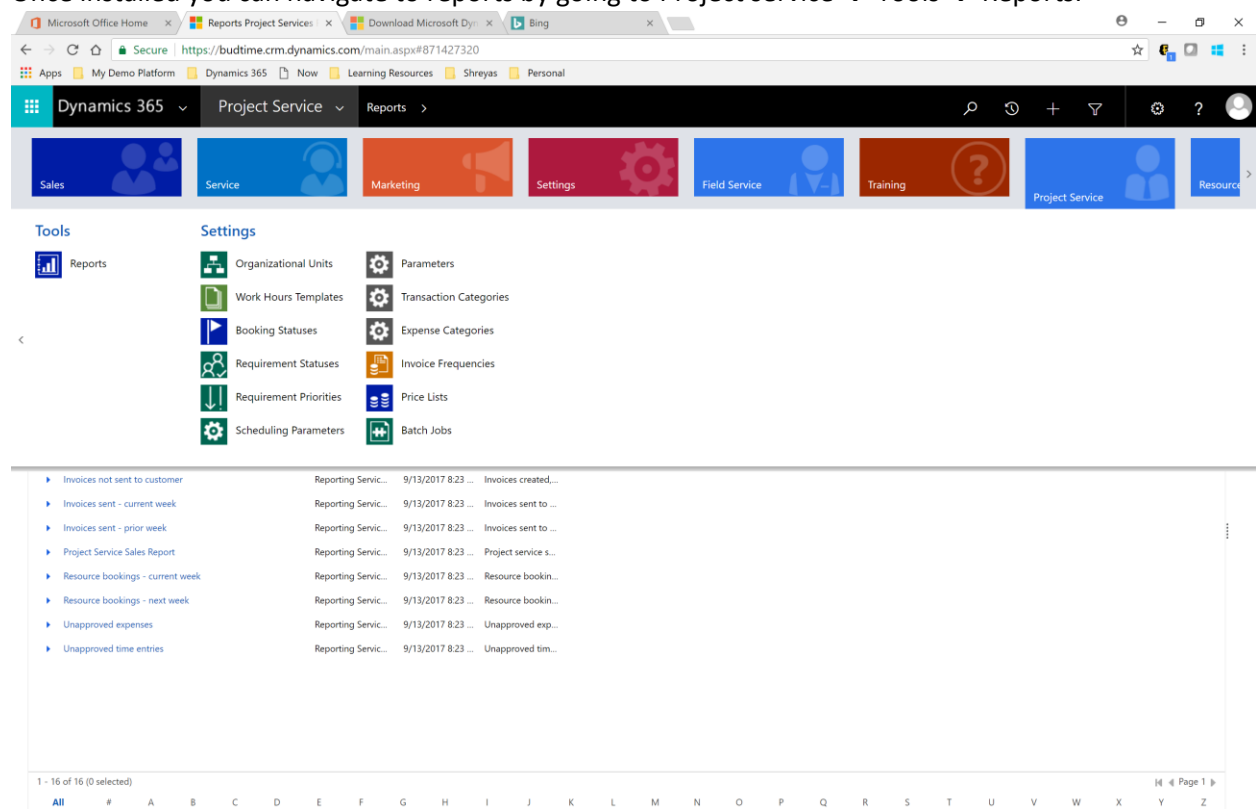
### SQL Server Reporting Services Reports

Since PSA is a solution built on top of dynamics CRM it uses SSRS reports to do structured reporting. There are some sample reports and excel templates available which can be downloaded and installed on top of the solution.

Here is the link to the sample reports

<https://www.microsoft.com/en-us/download/details.aspx?id=52951>

Once installed you can navigate to reports by going to Project service → Tools → Reports.



There are 16 reports here. Lets run Approved time entries for this week. You see that we have the time entry that we approved earlier.

The screenshot shows the Dynamics 365 CRM Report Wizard interface. The browser address bar indicates the URL: <https://budtime.crm.dynamics.com/main.aspx#871427320>. The page title is "Report Viewer: Approved time entries - current week - Google Chrome". The URL in the address bar is <https://budtime.crm.dynamics.com/crmreports/viewer/viewer.aspx?action=filter&helpID=ApprovedTimeCurrentWeek.rdl&id=%7bEDE0CEA5-DE21-E611-...>

The interface includes a navigation pane on the left with the following items:

- Project Services Reports
  - Approved expenses - current week
  - Approved expenses - prior week
  - Approved time entries - current week
  - Approved time entries - prior week
  - Contract gross margin - current month
  - Contract gross margin - prior month
  - Fixed price contract completion report
  - Invoiceable transactions
  - Invoices not sent to customer
  - Invoices sent - current week
  - Invoices sent - prior week
  - Project Service Sales Report
  - Resource bookings - current week
  - Resource bookings - next week
  - Unapproved expenses
  - Unapproved time entries

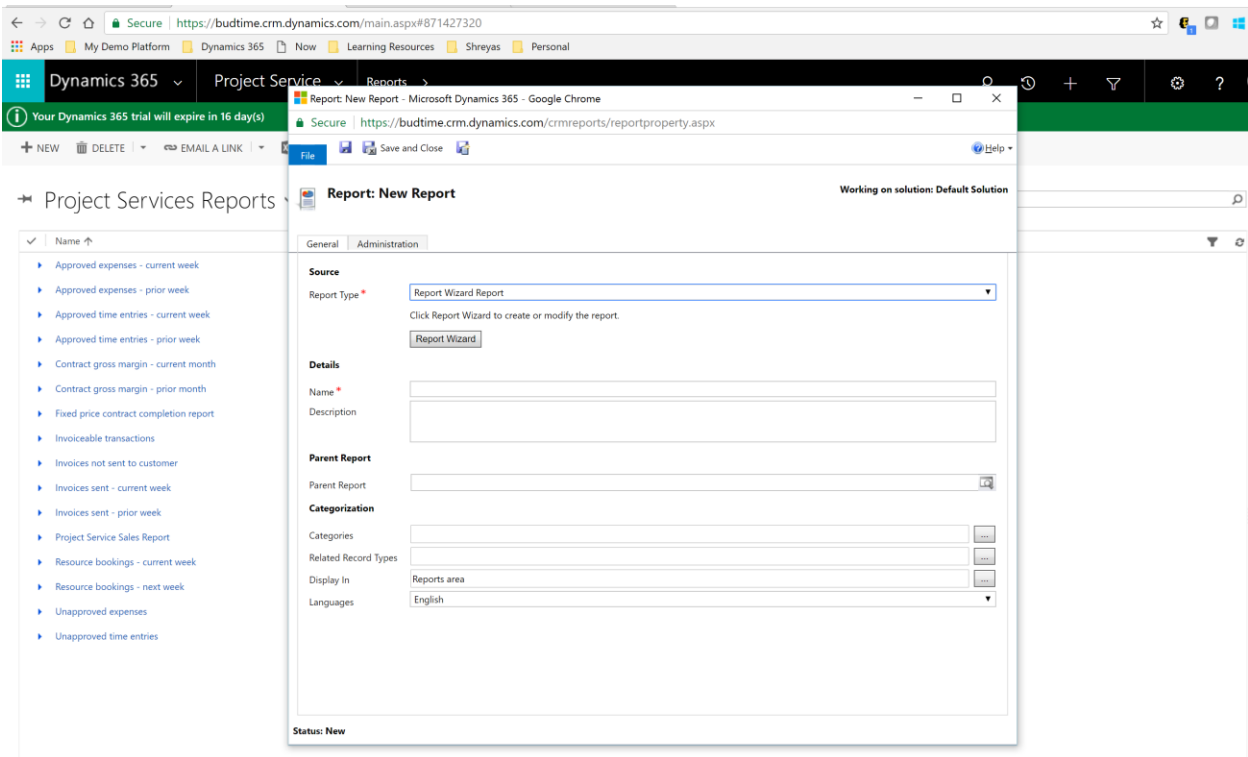
The main content area displays the report "Approved Time for the Current Week". The report shows a table with the following data:

resource	Type	Date	Project	Project manager	Project task
burbh Surana	Work	9/11/2017	AX Implementation Project	Sam Surana	Project kickoff
<b>resource total</b>					
<b>total approved time for the current week</b>					

## CRM Report Wizard

CRM report wizard is part of core CRM. You can use the report to create simple SSRS reports.

In the above screen click "New". You can create a new report from here.



## Custom SSRS Report Development

If the above reports are not sufficient and there is a report which is unique to the customer's business then a custom SSRS report can be developed. We will not go into details of this but here are a few things you need for the custom report development

- Visual Studio 2012
- Business Intelligence Development Studio (BIDS) extension
- CRM Report Authoring Extension.

More information on developing the reports can be found here

<https://msdn.microsoft.com/en-us/library/gg328097.aspx>

## Project Service Data Model

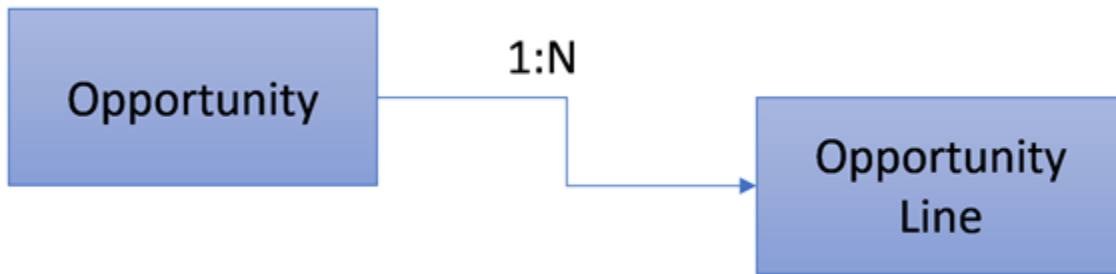
Following information is collated from the neil parkhurst's blog at <https://neilparkhurst.com/2017/02/16/psa-data-model/>

**Note:** It is worth being aware that Project Service and Field Service share many entities, therefore some of the msdyn\_ attributes may relate to Field Service. As this post has a focus on Project Service I will try to focus on the key entities / attributes you may need to be aware of for PSA.

I won't be documenting every field / entity in this post! But I hope to give enough of a flavor for the PSA data model to be able to navigate the detail yourself.

## Opportunities

As is standard with opportunities each opportunity has multiple opportunity lines. Project Service adds some additional attributes to these entities.



The additional attributes on opportunity and opportunity lines include ....

Entity	Schema Name	Display Name	Type	Comments
<b>Opportunity</b>	msdyn_ContractOrganization	Contracting Unit	Lookup (Organizational Unit)	The organizational unit in charge of the opportunity
<b>Opportunity</b>	msdyn_OrderType	Order Type	Option Set	Options include "Work based", "Item Based" and "Service-Maintenance Based".  Opportunities that have an

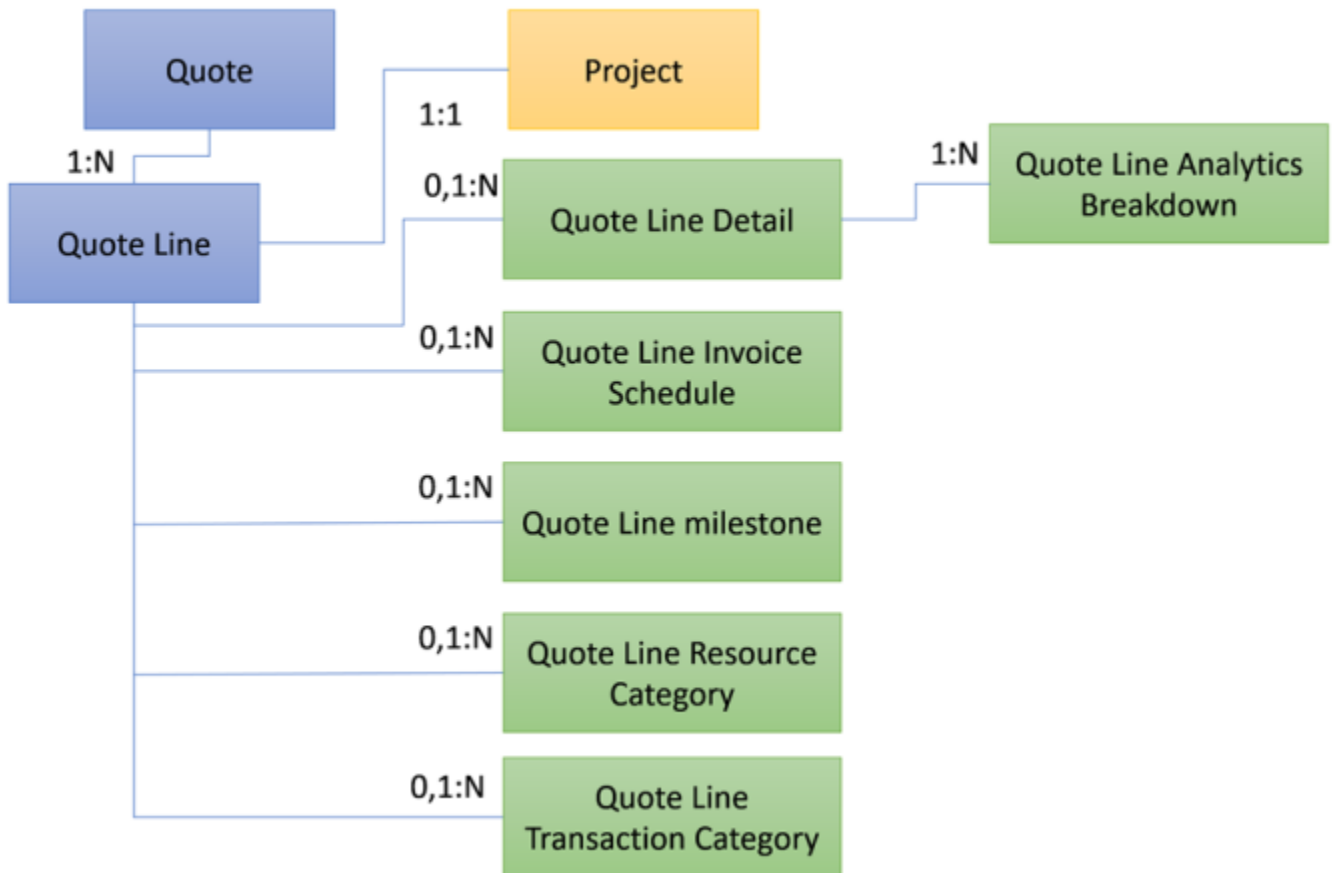
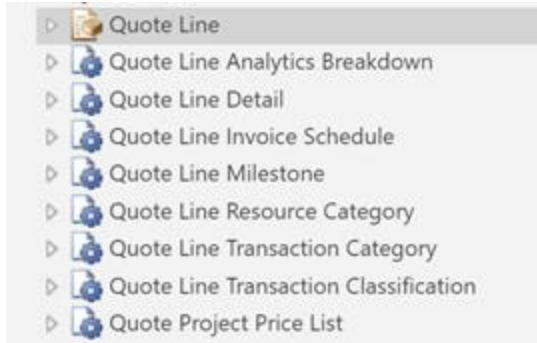
Entity	Schema Name	Display Name	Type	Comments
<b>Opportunity Line</b>	msdyn_BillingMethod	Billing Method	Option Set (Global)	Billing method for the project opportunity line. Options include Time and Material and Fixed Price
<b>Opportunity Line</b>	msdyn_BudgetAmount	Budget Amount	Currency	The customers budget for the opportunity line.
<b>Opportunity Line</b>	msdyn_linetype	Line Type	Option Set (Global)	The field to distinguish the order lines to be of project service or field service. Options include "Project Service Line" or "Field Service Line"

order type of "Work Based" will be Project based opportunities.

## Quotes

As we associated quotes with opportunities not only do we get quote and quote line detail enhancements but also a number of new entities specific to Project Service come into play.

The quote line contains a link to the project entity and a number of additional entities are also associated that support the detailed estimation capabilities of project service.



**Quote line detail** – the “supporting” detail for the quote line. Including fields like transaction class, resourcing unit, role, start date, end date and so on. The total sales price will be rolled up into the quote line to give the quoted amount.

**Quote line analytics breakdown** – holds additional line detail for reporting purposes. (Calculated information such as gross margin is held in the analytics table.)


**Quote line invoice schedule** – holds the intended invoice schedule for customer billing and will get carried forward to the project contract when the quote is won. This is generated off the billing frequency from the quote line.

**Quote line milestone** – milestones show the timing of fixed price billing items.

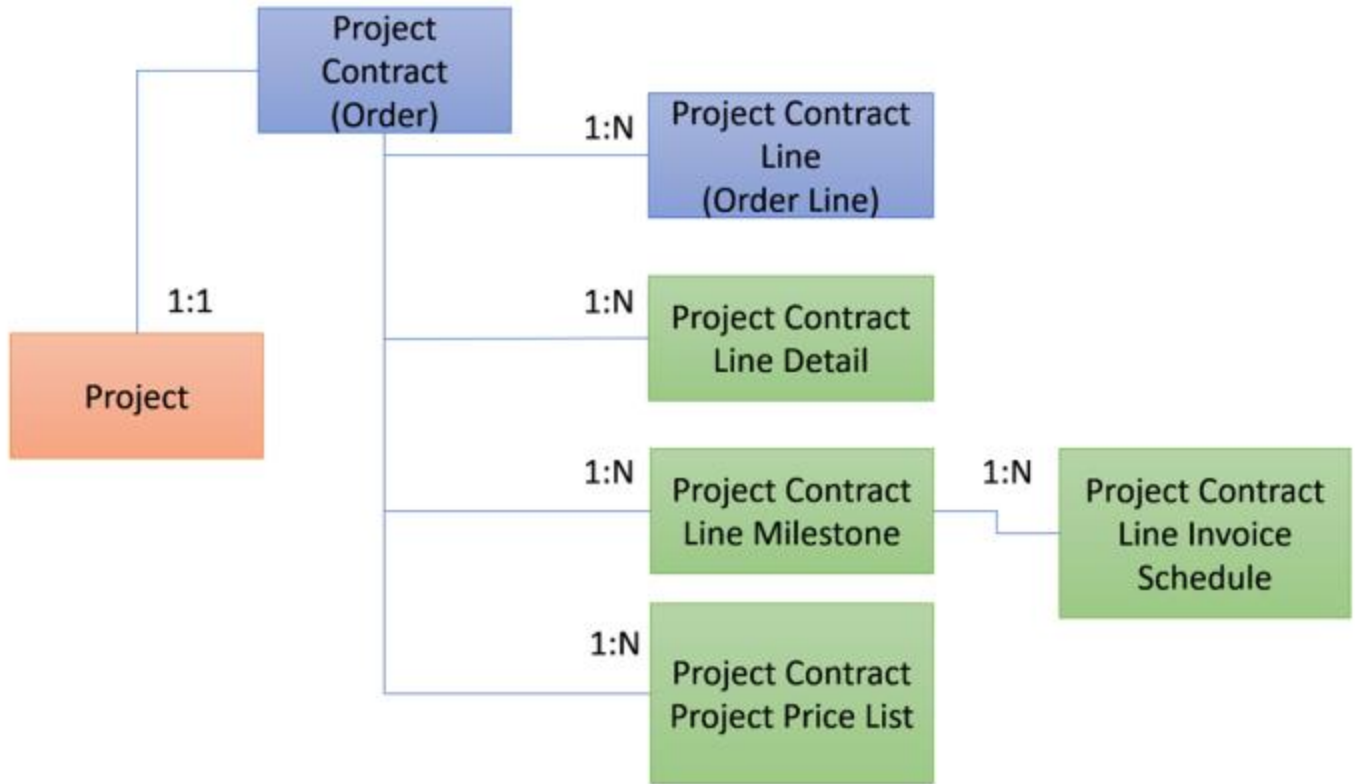
**Quote line resource** – holds the values for quote line to say if this resource / transaction category is included or excluded in the quote.

## Project Contract

The concept behind the project contract in Project service is actually quite similar to quotation. The contract is actually the order entity and the contract line is the order line entity. But both of these will have additional fields specific to Project Service. The additional project contract entities are all named “project contract line ...”.

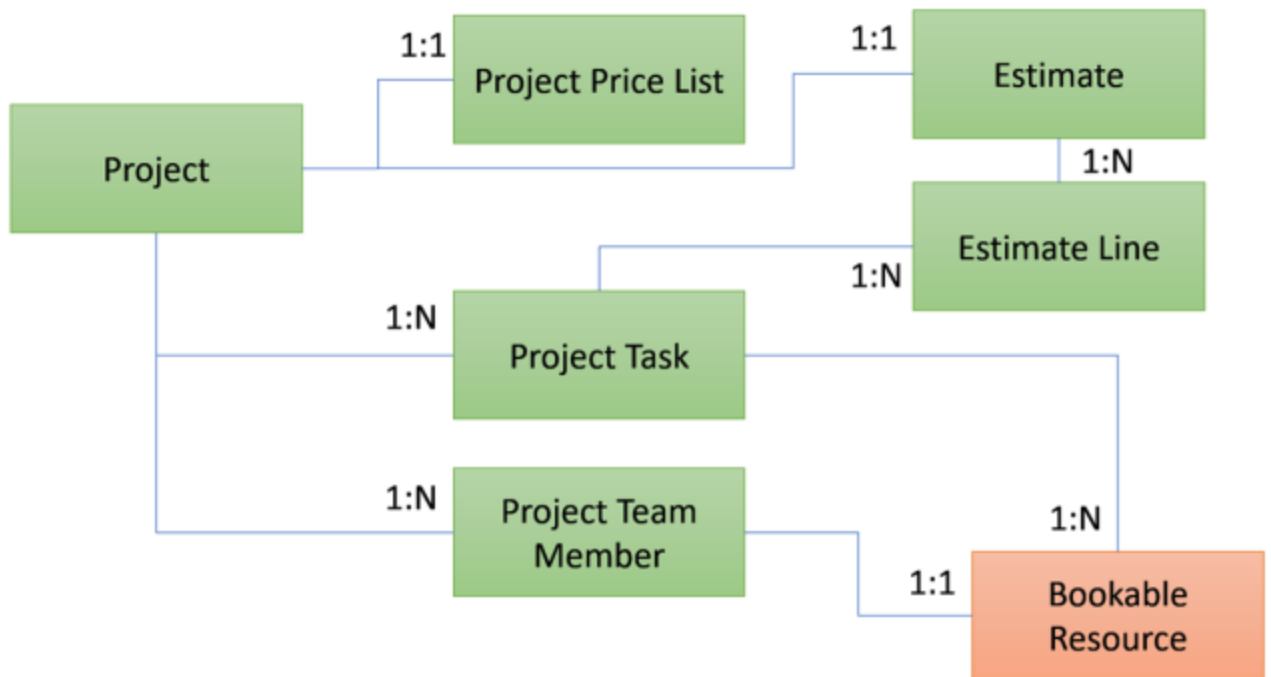
- ▷  Project Contract Line Detail
- ▷  Project Contract Line Invoice Schedule
- ▷  Project Contract Line Milestone
- ▷  Project Contract Line Resource Category
- ▷  Project Contract Line Transaction Category
- ▷  Project Contract Line Transaction Classification
- ▷  Project Contract Project Price List





## Project

Project is a new entity specific to PSA and is the container for all of your project tasks and resourcing detail. Each project has a project team and also a number of tasks. (Both of these entities will be related to the concept of a bookable resource.) The estimate and estimates line entities contain the cost and sales estimates.



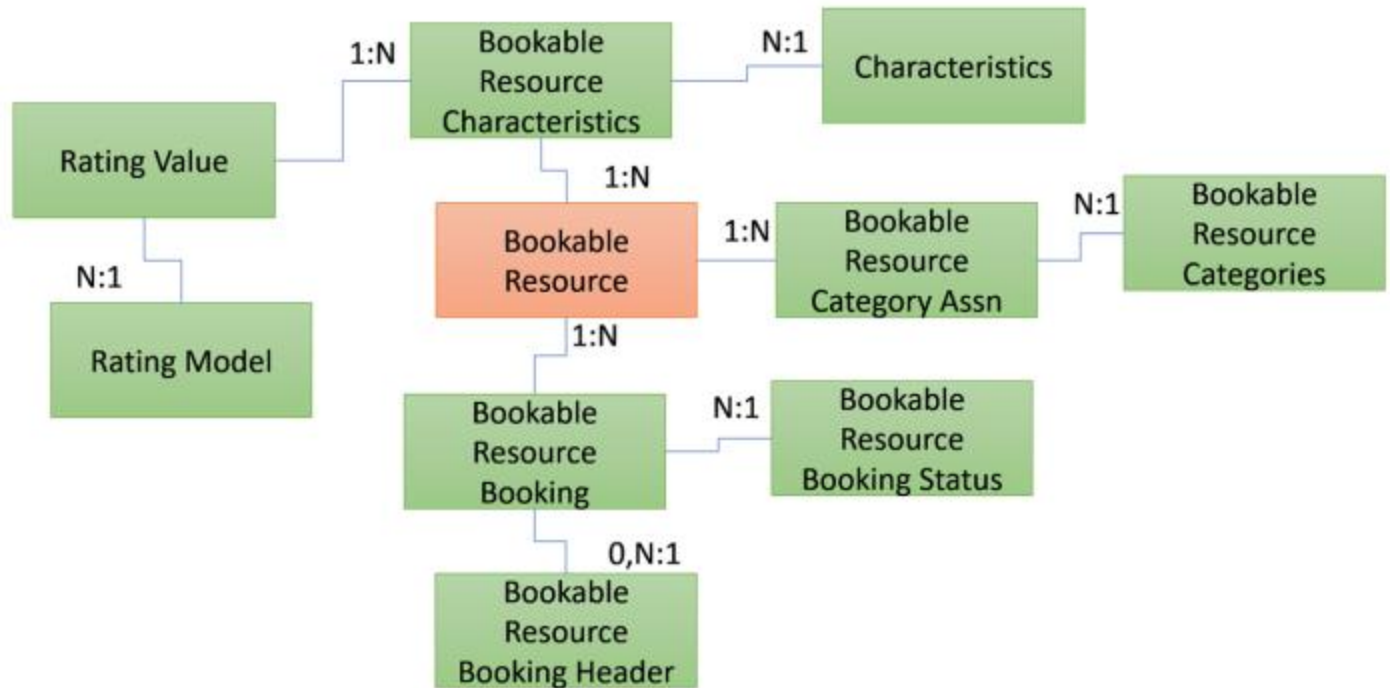
## Bookable Resource

Each bookable resource then has multiple bookings. In Field Service the “Bookable Resource Booking” would relate to a work order and in PSA it will relate to a project task. (As we saw in the previous diagram.)

Bookable resources are shared between Field Service and Project Service. Each bookable resource can have a number of characteristics (skills) and each of the skills has a proficiency rating.

A bookable resource can be a user, contact, account (etc). Although in Project Service only resources that are users can currently record details on timesheets and submit expenses. So generally speaking, when I talk about a bookable resource we are ultimately considering a system user.

Categories are roles. So, each bookable resource can have many roles via the “Bookable Resource Category Assn” entity. (Although one is marked as their default role.) For example, my “main” role is Functional Consultant. But when required I can also play the role of Business Analyst, Project Manager or reluctantly Tester. It will therefore be common for one resource to have multiple roles but you can only one role per project. (I have many hats that I often swap but I never wear two at once!)



## Actuals

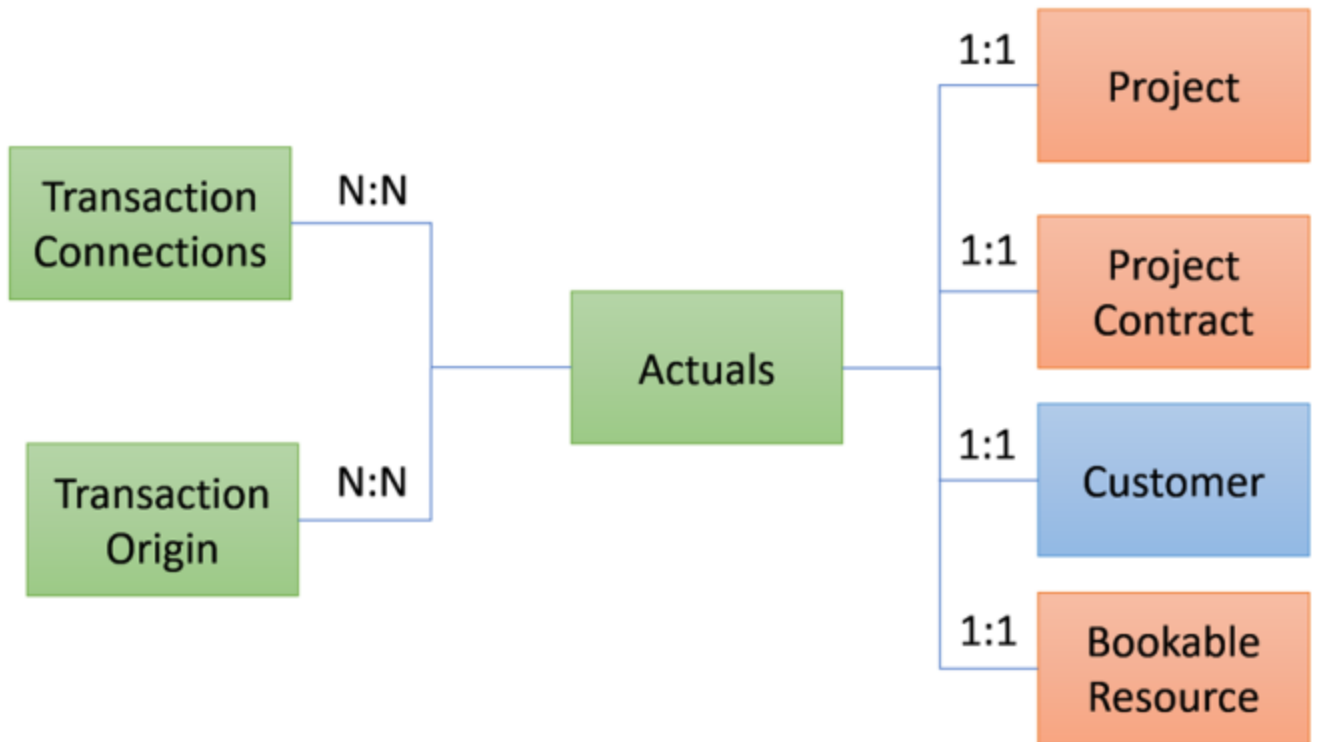
The actuals entity will store details of actual business transactions on your project. Including information on sales values, costs and quantities. When you create financial reports or maybe source data for integration with other systems, the actual entity and its associated entities will be a common source for this data.

Transaction Origin, this holds the origin of the actual transaction entity and its associated entity. Including the transaction type.

Transaction Connections shows how the connections relate. For example, an unbilled say to a estimate line.

The actual entity also has relationships with the other entities in CRM such as the project, project contact, customer and bookable resource.

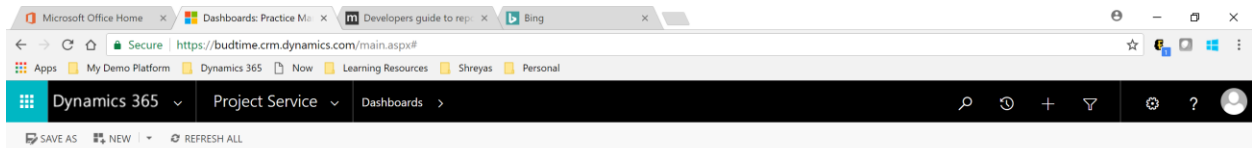
Actuals get created when there is a financial impact on your project. Meaning draft or submitted expenses would not show. Actuals would be created once the expense (or time) entries are approved.



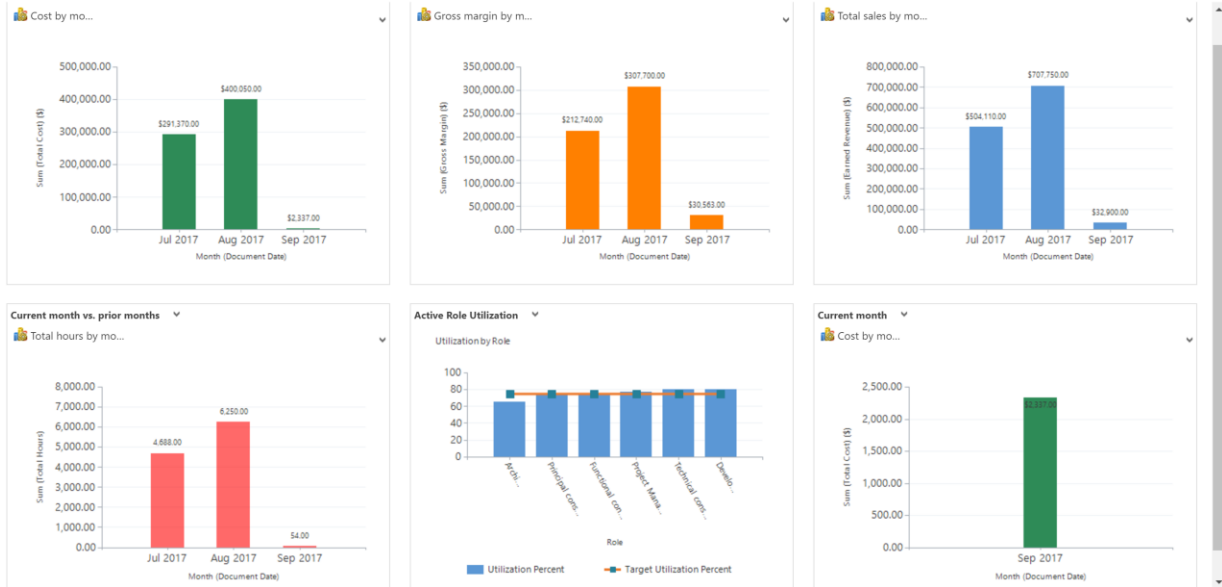
## Dashboard

### Practice Management Dashboard

Practice manager can look at higher level metrics to manage the business. They can be drilled down to get more precise information. Navigate to Project Service → Dashboards and select "Practice Management Dashboard".



## Practice Management Dashboard



## Excel Templates

Another method of reporting other than SSRS reports. The sample report pack introduced earlier comes with 5 sample excel templates. After this solution is installed, Go to Settings → Templates → Document templates. From the view chevron, you can click on Excel Templates. Uploading the excel templates is discussed in the Readme file of the Sample Repots download. Here is how it looks like.

The screenshot shows the Dynamics 365 interface with the 'Templates' section selected. The page title is 'Excel Templates'. A search bar is present with the placeholder text 'Search for records'. Below the search bar is a table listing various Excel templates. The table has columns for Type, Name, Status, Modified On, Modified By, and Description. The templates listed are:

Type	Name	Status	Modified On	Modified By	Description
Microsoft Excel	Actuals Analysis	Activated	9/13/2017 10:06 AM	Sam Surana	
Microsoft Excel	Campaign Overview	Activated	8/22/2017 9:29 PM	SYSTEM	
Microsoft Excel	Case SLA Status	Activated	8/22/2017 9:29 PM	SYSTEM	
Microsoft Excel	Case Summary	Activated	8/22/2017 9:29 PM	SYSTEM	
Microsoft Excel	Pipeline Management	Activated	8/22/2017 9:29 PM	SYSTEM	
Microsoft Excel	Project Contracts	Activated	9/13/2017 10:05 AM	Sam Surana	
Microsoft Excel	Project Opportunities	Activated	9/13/2017 10:05 AM	Sam Surana	
Microsoft Excel	Project Quotes	Activated	9/13/2017 10:05 AM	Sam Surana	
Microsoft Excel	Project Summary	Activated	9/13/2017 10:04 AM	Sam Surana	

At the bottom of the table, it shows '1 - 9 of 9 (0 selected)'. Below the table is a navigation bar with tabs for 'All' and letters A through Z.

To run the Templates we go the associated entity type and run the excel template. For example, if we want to run the Project Quotes excel template, we would go to Project Service → Quotes and run it from there.

Microsoft Office Home | Quotes All Quotes - Mic | Developers guide to rep | Bing

Secure | https://budtime.crm.dynamics.com/main.aspx#576182378

Apps | My Demo Platform | Dynamics 365 | Now | Learning Resources | Shreyas | Personal

Dynamics 365 | Project Service | Quotes

NEW | DELETE | EMAIL A LINK | RUN REPORT | EXCEL TEMPLATES | EXPORT TO EXCEL | IMPORT DATA | CHART PANE | VIEW

All Quotes

Search for records

Name	Status	Amount	Customer	Created On	Profitability	Adjusted Gross	Competitive	Estimated Budget
CRM Implementation for Alpine	Draft	\$0.00	Alpine Ski Shop	8/22/2017 11:32 PM	Not Profitable	0.00	Customer Budg...	Within Custome...
CRM Implementation for Chic - APAC	Draft	\$176,400.00	Chic Department Stores	8/22/2017 11:32 PM	Profitable	72.79	Outside Custom...	Within Custome...
CRM Implementation for Chic - APAC(old)	Draft	\$176,400.00	Chic Department Stores	8/22/2017 11:32 PM	Profitable	100.00	Outside Custom...	Within Custome...
CRM Implementation for Chic - NA	Active	\$176,400.00	Chic Department Stores	8/22/2017 11:32 PM	Profitable	72.79	Outside Custom...	Within Custome...
CRM Implementation for Chic - NA(old)	Draft	\$176,400.00	Chic Department Stores	8/22/2017 11:33 PM	Profitable	100.00	Outside Custom...	Within Custome...
CRM Offshore Quote 2	Draft	\$244,000.00	Chic Department Stores	8/22/2017 11:32 PM	Profitable	57.02	Within Custome...	Within Custome...
CRM Offshore Quote 3	Draft	\$254,400.00	Chic Department Stores	8/22/2017 11:32 PM	Profitable	100.00	Outside Custom...	Within Custome...
CRM Offshore Quote 4	Draft	\$254,400.00	Chic Department Stores	8/22/2017 11:32 PM	Profitable	100.00	Outside Custom...	Within Custome...
CRM Offshore Quote 5	Draft	\$254,400.00	Chic Department Stores	8/22/2017 11:32 PM	Profitable	100.00	Outside Custom...	Within Custome...
CRM Quote 2	Draft	\$254,400.00	Chic Department Stores	8/22/2017 11:33 PM	Profitable	100.00	Outside Custom...	Within Custome...
CRM Quote 3	Draft	\$254,400.00	Chic Department Stores	8/22/2017 11:33 PM	Profitable	100.00	Outside Custom...	Within Custome...
CRM Quote 4	Draft	\$254,400.00	Chic Department Stores	8/22/2017 11:33 PM	Profitable	100.00	Outside Custom...	Within Custome...
CRM Quote 5	Draft	\$254,400.00	Chic Department Stores	8/22/2017 11:33 PM	Profitable	100.00	Outside Custom...	Within Custome...
CRM Ticketing Opportunity	Draft	\$0.00	Alpine Ski Shop	8/22/2017 11:32 PM	Not Profitable	0.00	Customer Budg...	Within Custome...
Dynamics AX Implementation	Won	\$112,500.00	Active Transport Inc.	9/6/2017 12:59 PM	Profitable	32.89	Within Custome...	Within Custome...
PSA Opportunity - First Class	Closed	\$100,060.00	First Class Mail	9/5/2017 12:15 PM	Profitable	99.95	Outside Custom...	Exceeds Custom...
PSA Opportunity - First Class	Won	\$100,060.00	First Class Mail	9/5/2017 12:15 PM	Profitable	99.95	Outside Custom...	Exceeds Custom...
PSA Opportunity - First Class	Draft	\$77,260.00	First Class Mail	9/5/2017 12:21 PM	Profitable	75.08	Customer Budg...	Within Custome...
RM Tool	Draft	\$0.00	Active Transport Inc.	8/22/2017 11:32 PM	Not Profitable	0.00	Customer Budg...	Within Custome...

1 - 19 of 19 (0 selected)

All | Page 1

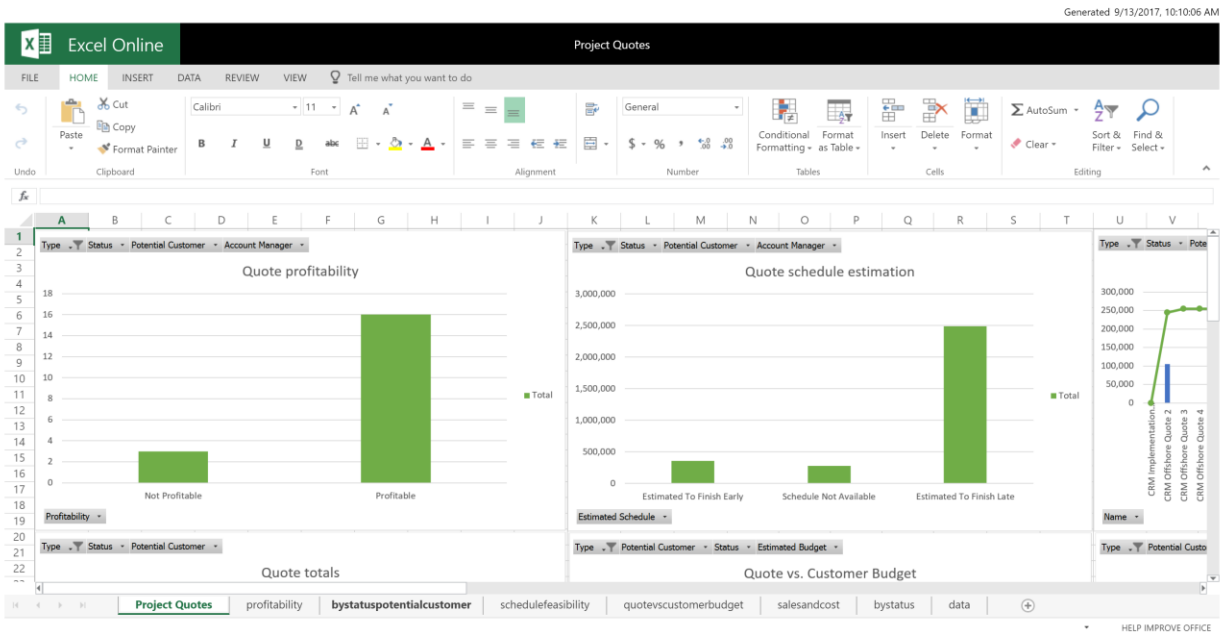
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Secure | https://budtime.crm.dynamics.com/main.aspx#610632609

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Dynamics 365 | Project Service | Quotes

RETURN TO DYNAMICS 365...



## Power BI

Power BI templates for PSA will be introduced later this year.

Templates will ship with its own dashboard and scripts.

Will need to bring own

- SQL Server or SQL Azure DB
- Power BI pro license
- Scribe license to extract the Dynamics CRM Data to Azure SQL db.



## Appendix A. Reference Materials

1. If you have a DLP account, you can go thru the demo of the PSA using following link.  
<https://mbspartner.microsoft.com/CRM/Topic/56>
2. Project service Automation user guide → <https://www.microsoft.com/en-us/dynamics/crm-customer-center/dynamics-365-for-project-service-automation-user-s-guide.aspx>