2017

Dynamics 365 - Project Service Automation Hands On Guide

Sam Surana

Microsoft

9/14/2017

Table of Contents

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.

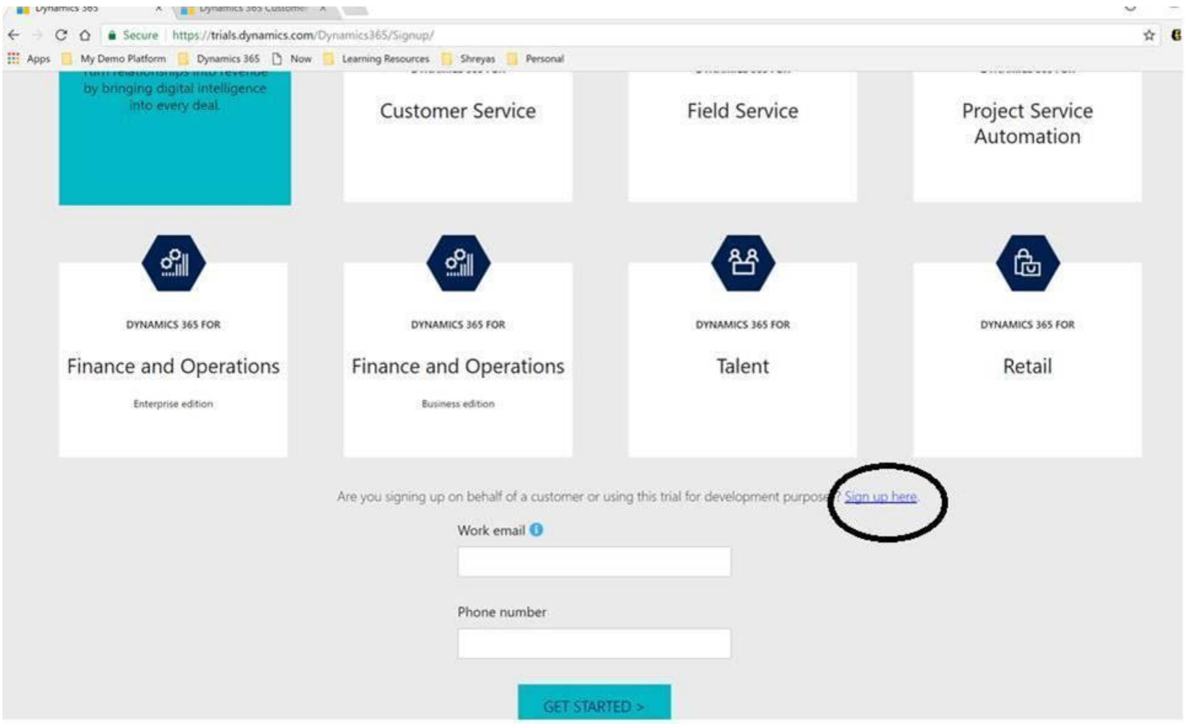
Project billing

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

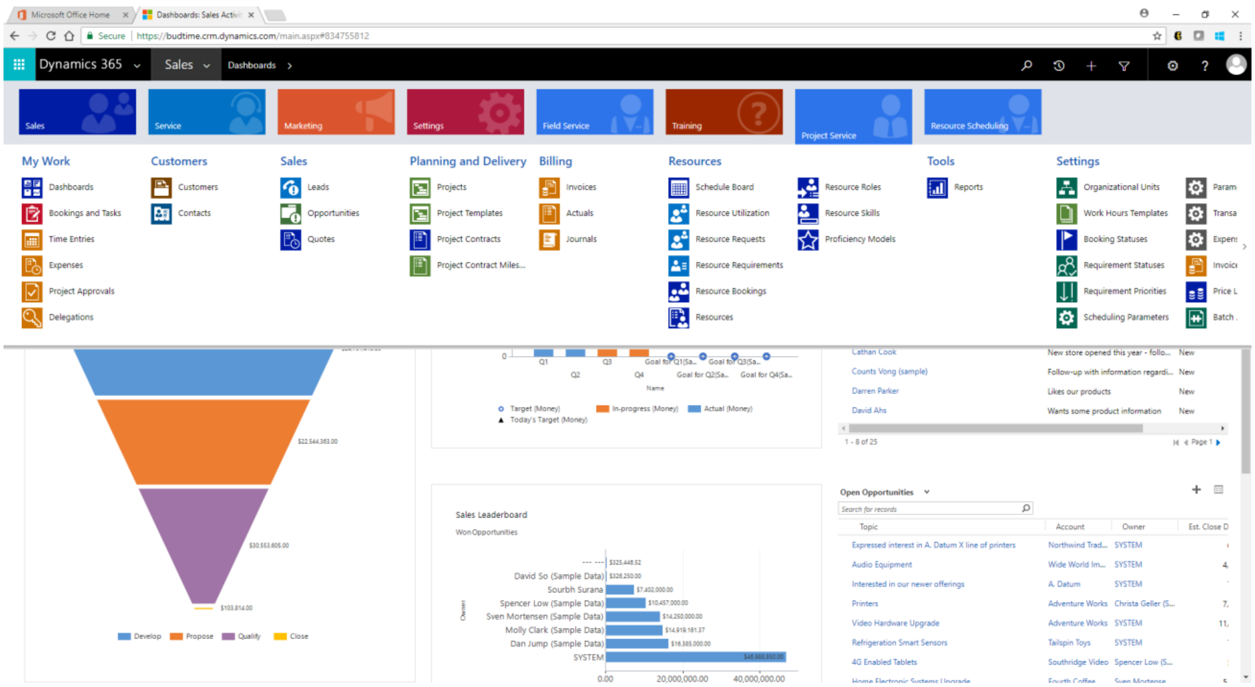
1. Create a trial for Dynamics 365 – Project Service Automation using the following link https://trials.dynamics.com/Dynamics365/Signup/

   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.

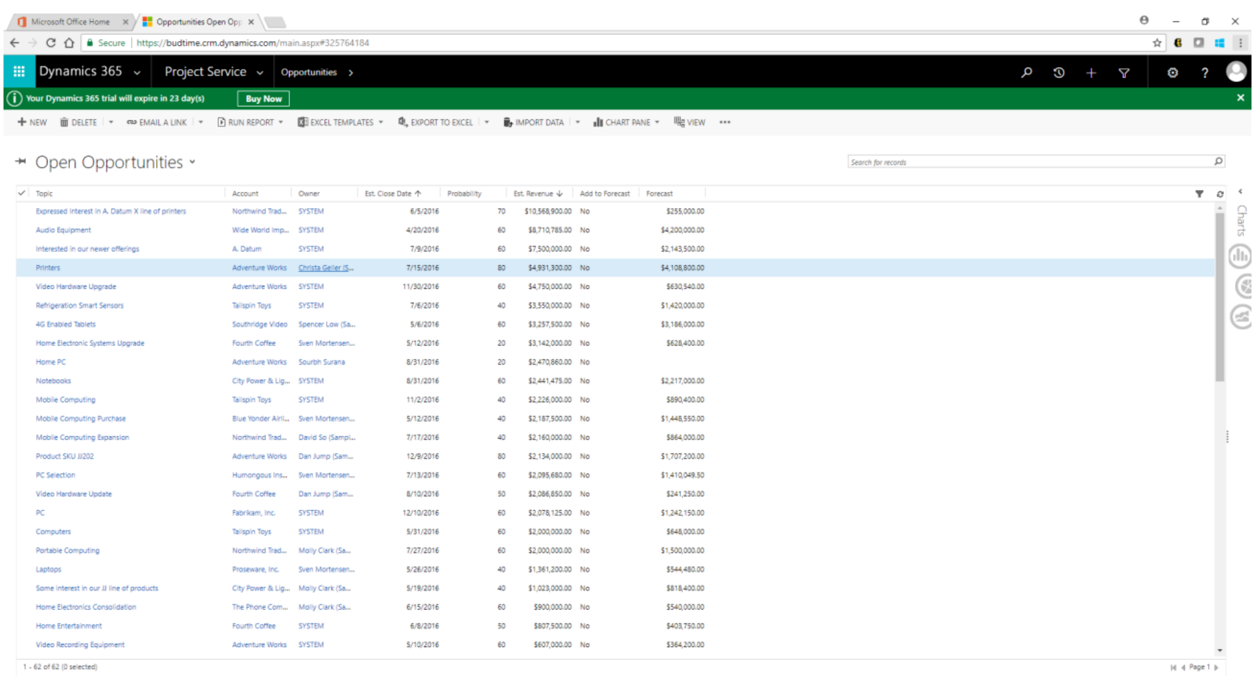


Creating Project Service Opportunity

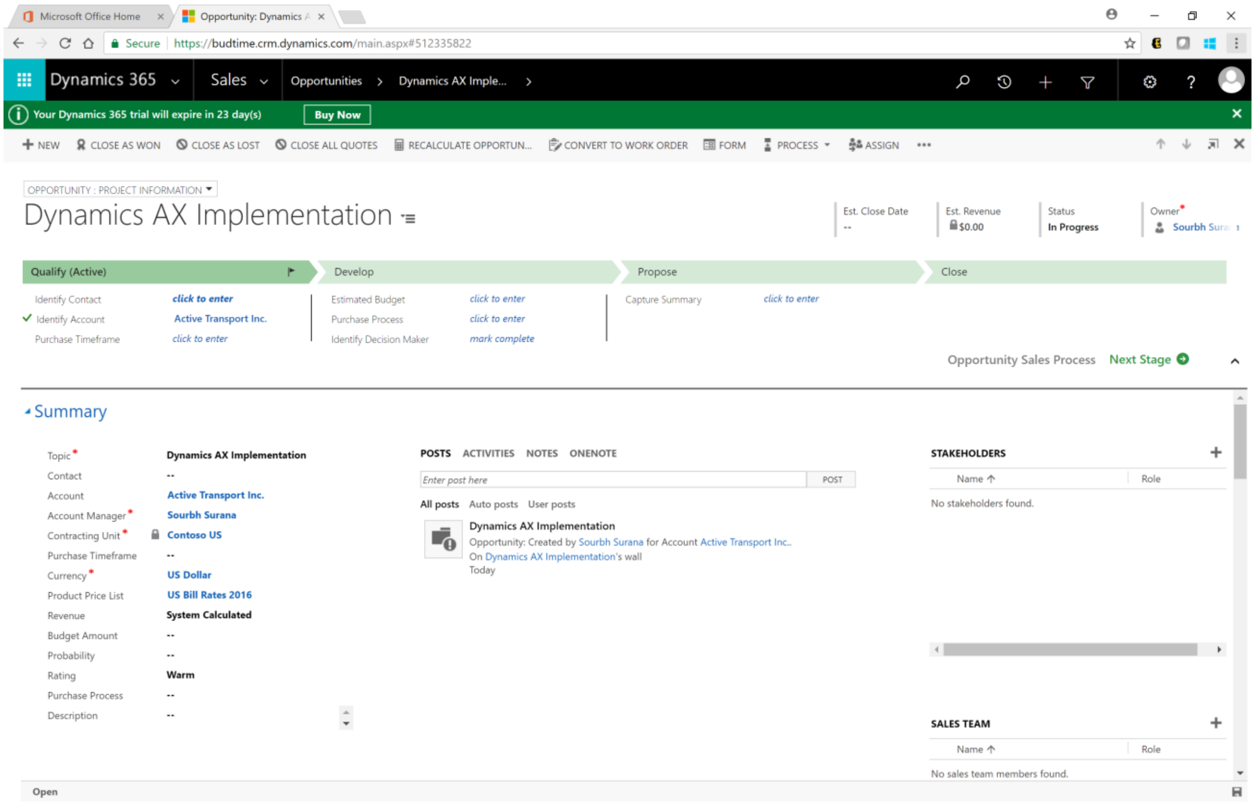
Navigate to the Project service tab → Sales → Opportunities



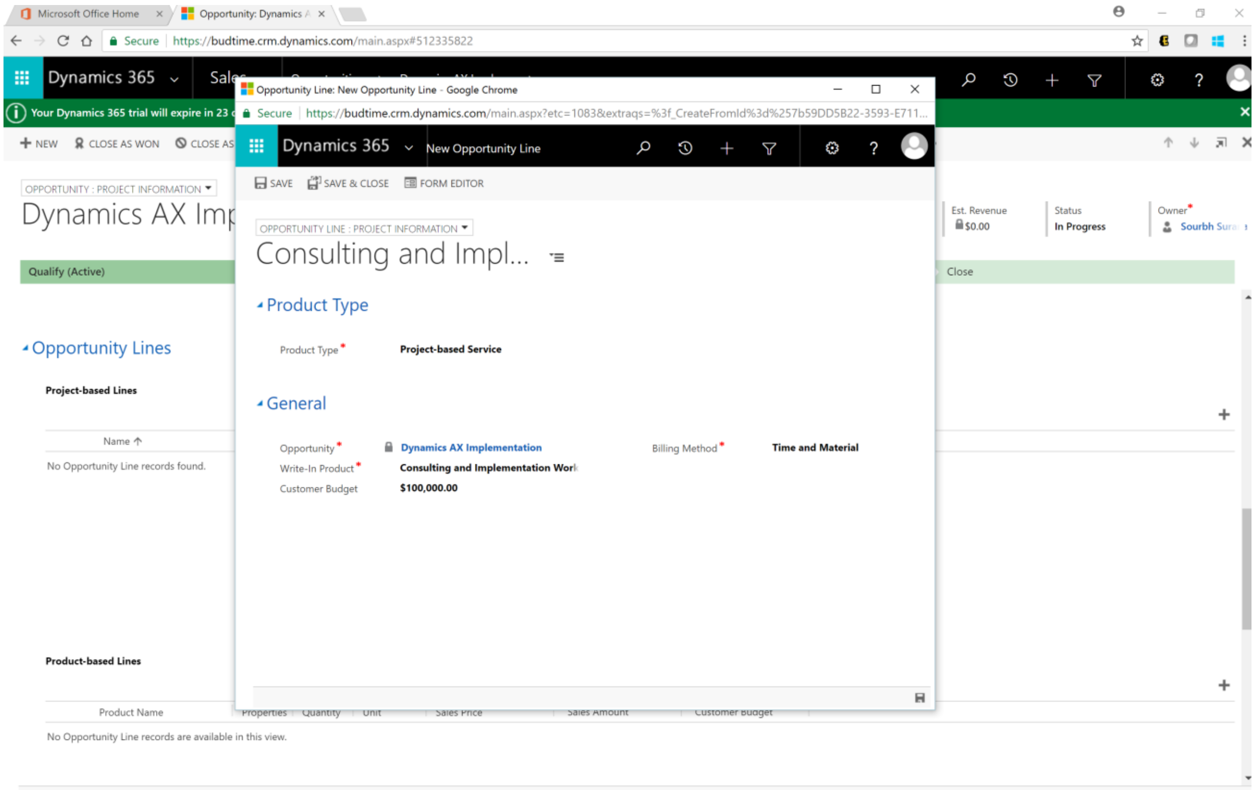
This shows the list of open opportunities. Click on “New” button on the command bar.



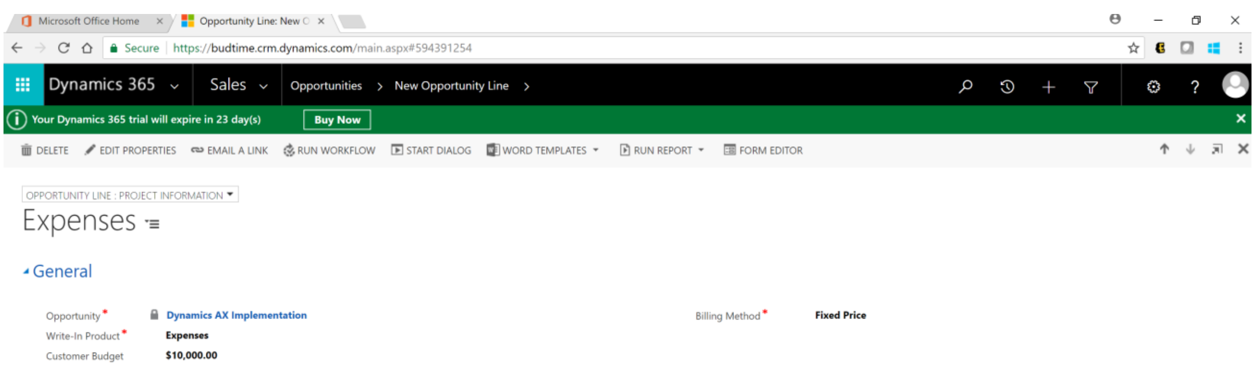
Add the fields as in the screenshot below and save



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

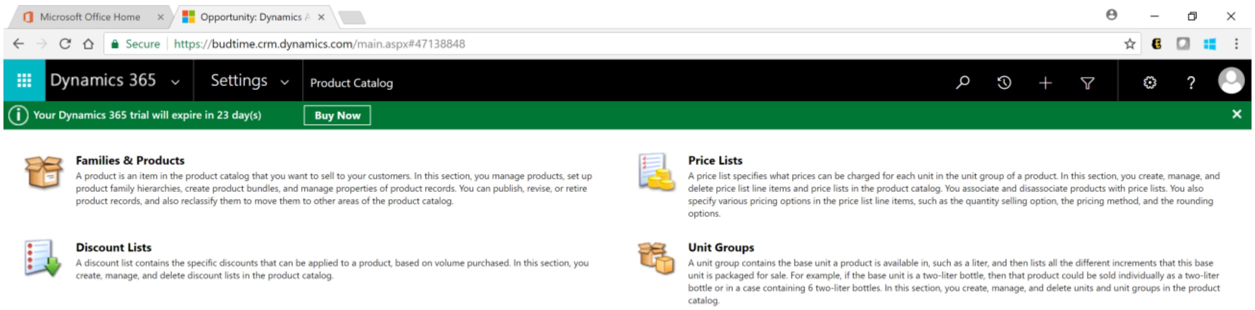


We will also add one more line for expenses as fixed billing method.

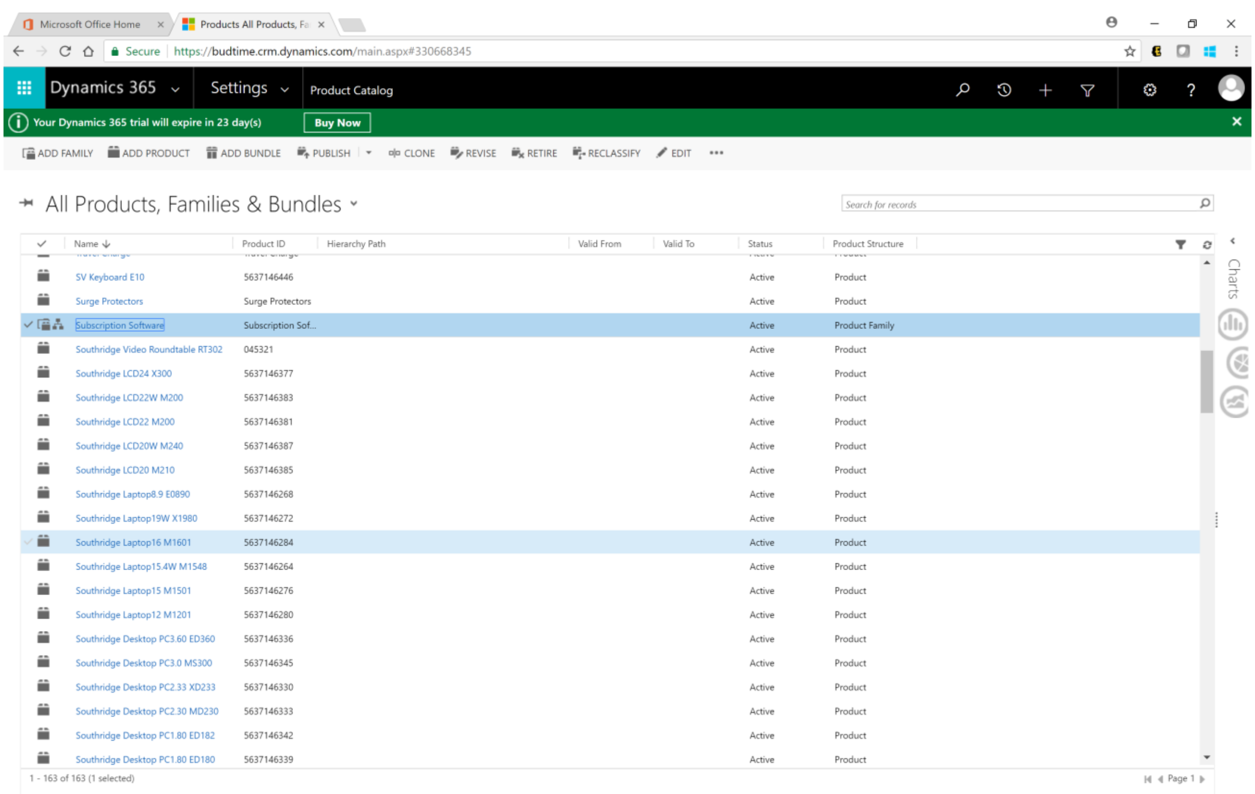


We can also add products to the same opportunity using the product based lines.

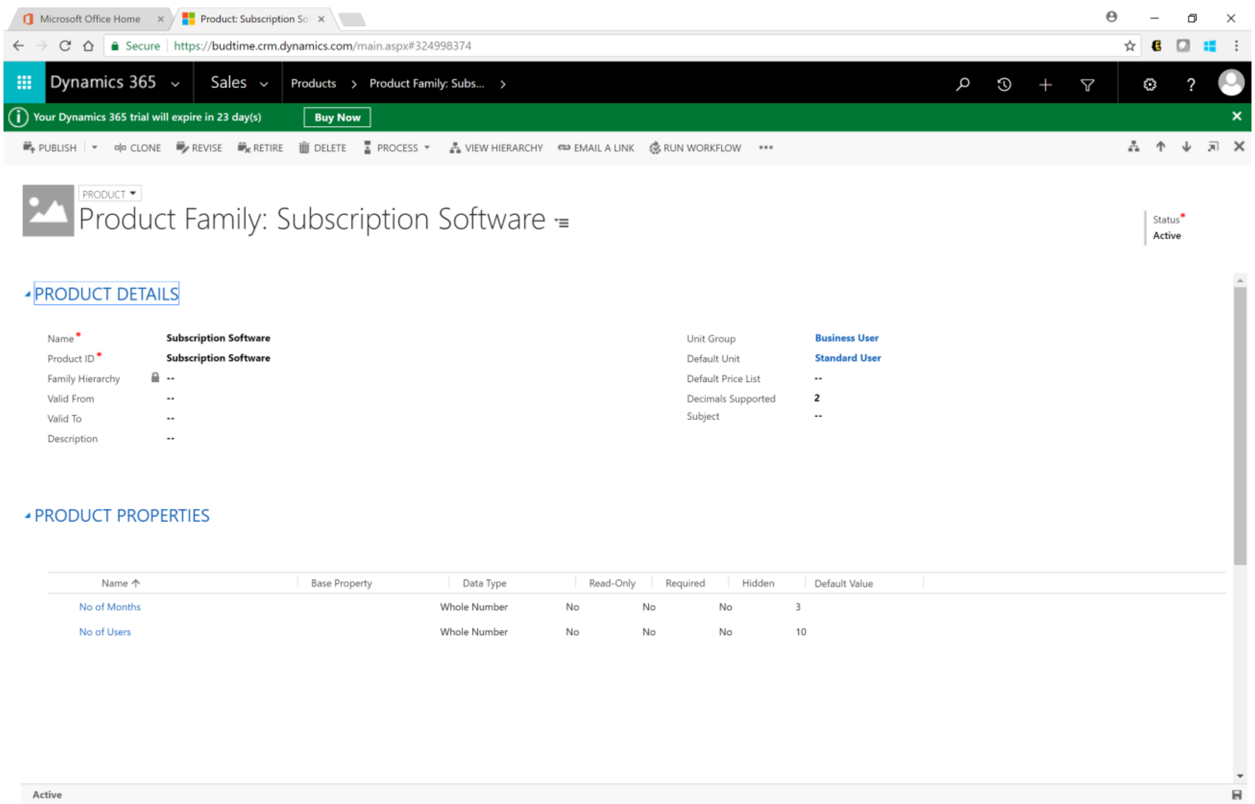
Let’s navigate to the product catalog by clicking on Settings → Product Catalog → Families & Products



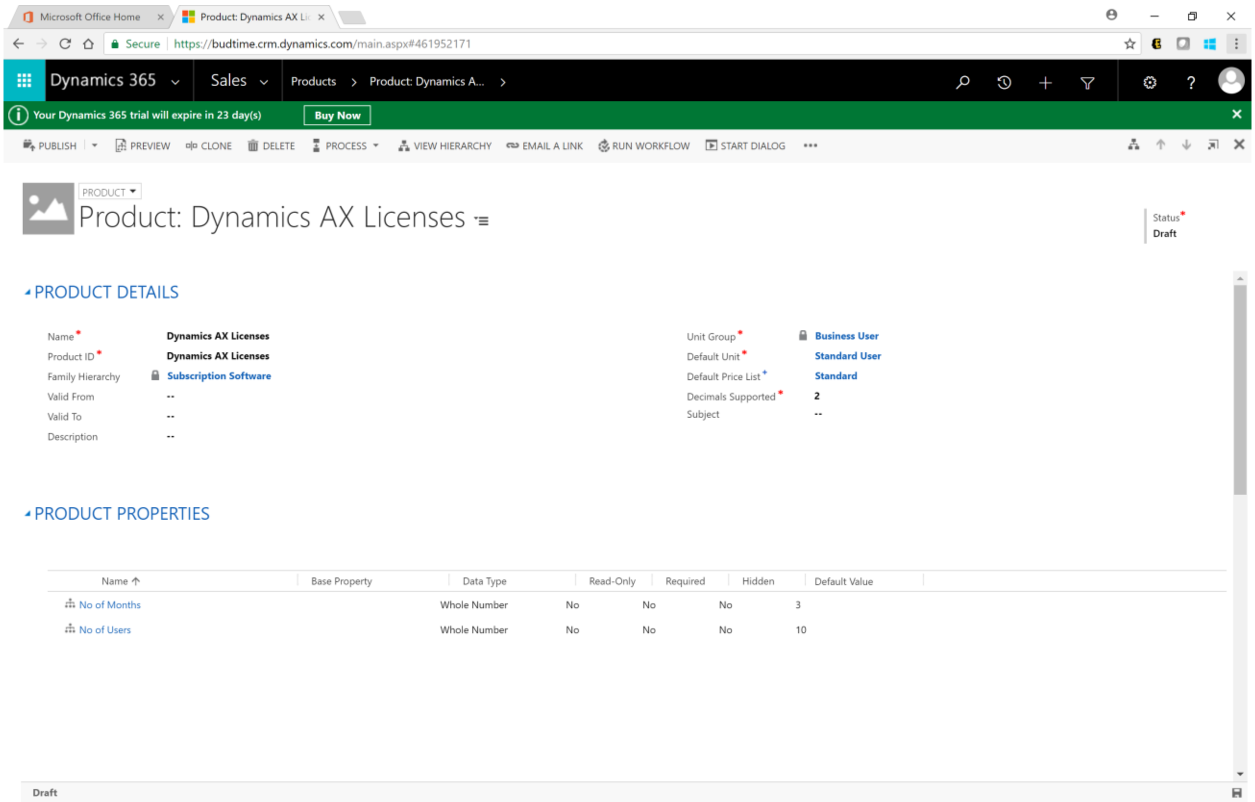
You should be able to see the pre-existing products, families and bundles. Navigate to or Search for “Subscription Software” and open it up.



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



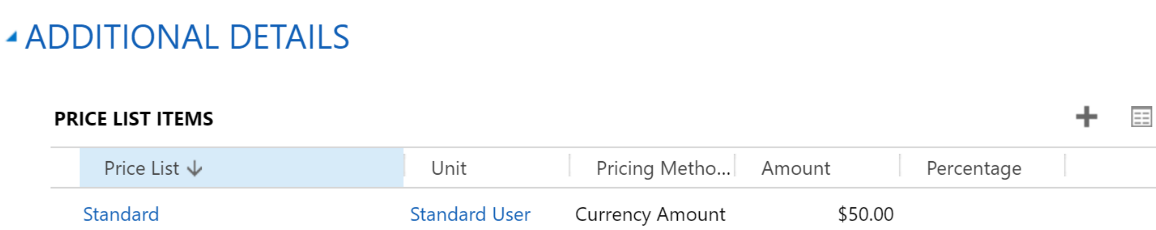
Close it to get back to the view and with Subscription Software selected, click on add a new product. We will be adding Dynamics AX licenses to this product family.

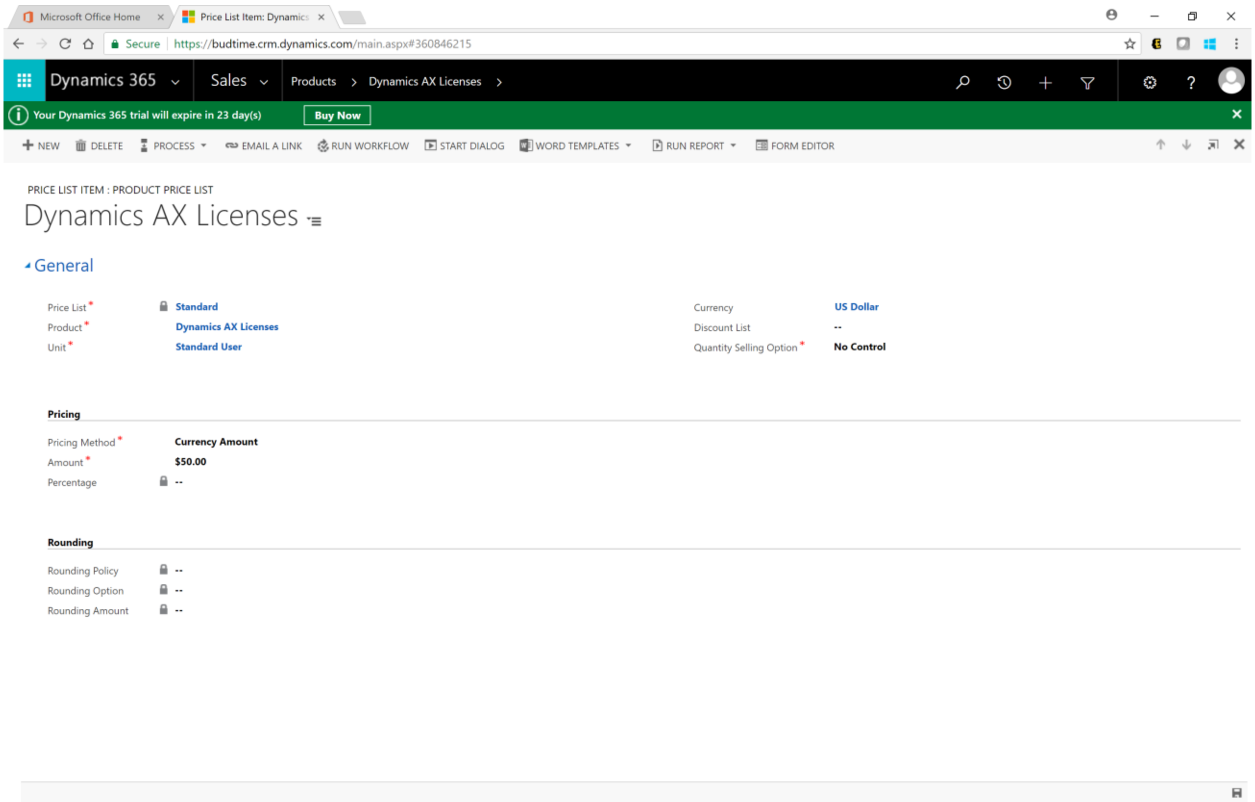


Scroll down and add a price list

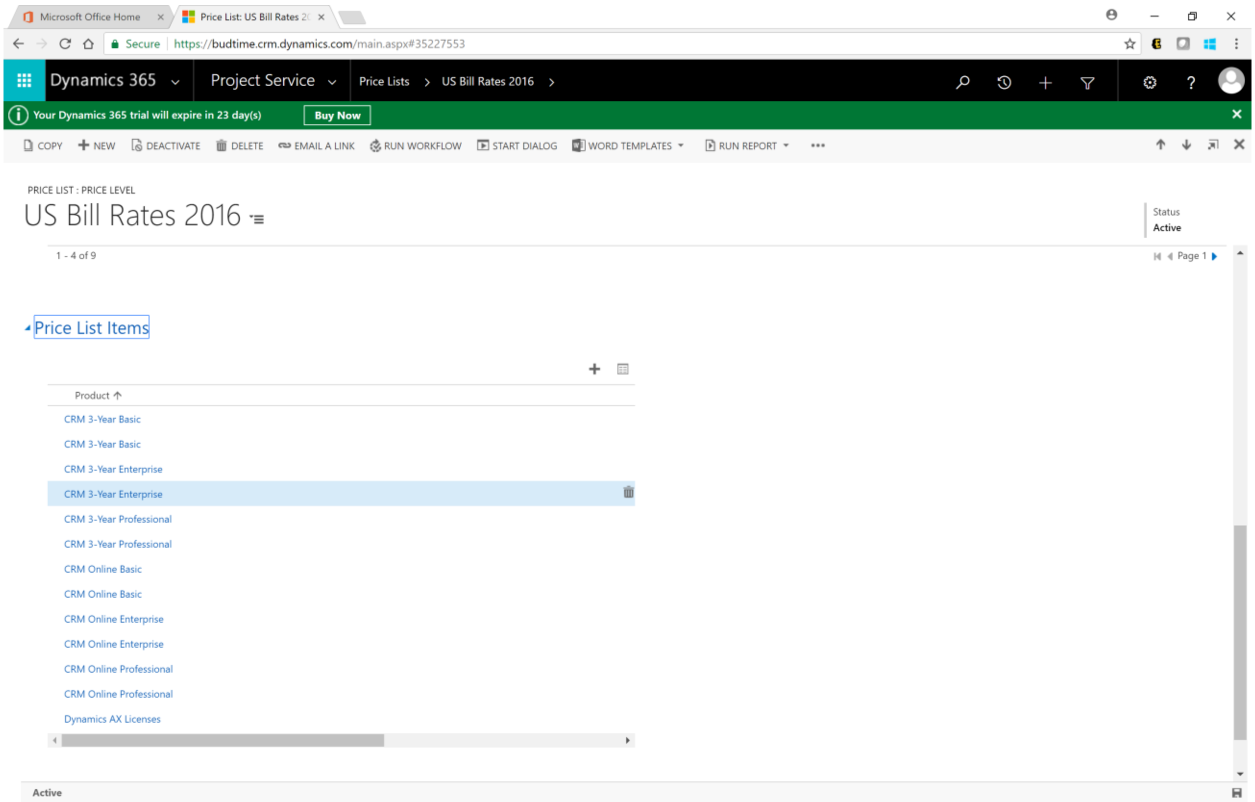
And select the price list as default price list on the product.

Click on “Publish” to make product active.

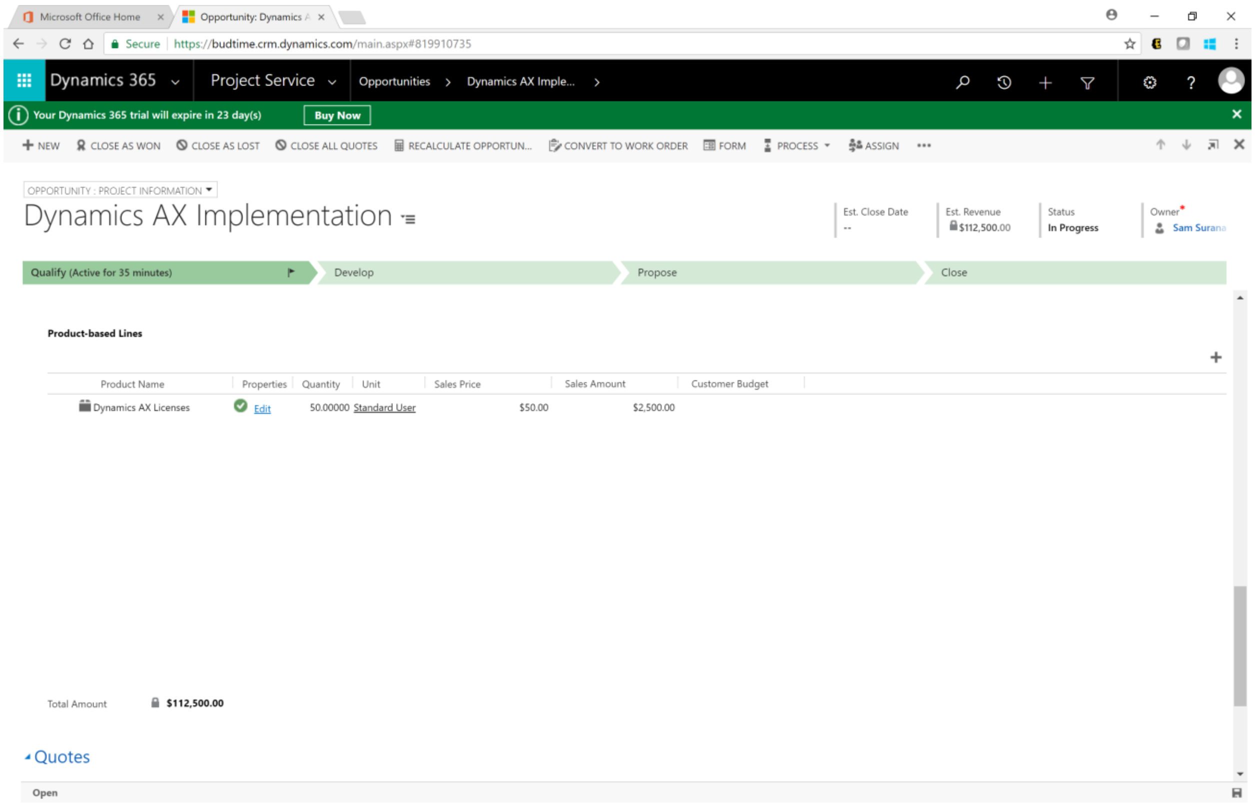




This product needs to be added to the pricelist used by the opportunity if it has to show up in the opportunity. Navigate to Project service → Price lists and find & open the "US Bill Rates 2016" Price list. Scroll down to the Pricelist Items and add the Dynamics AX licenses.

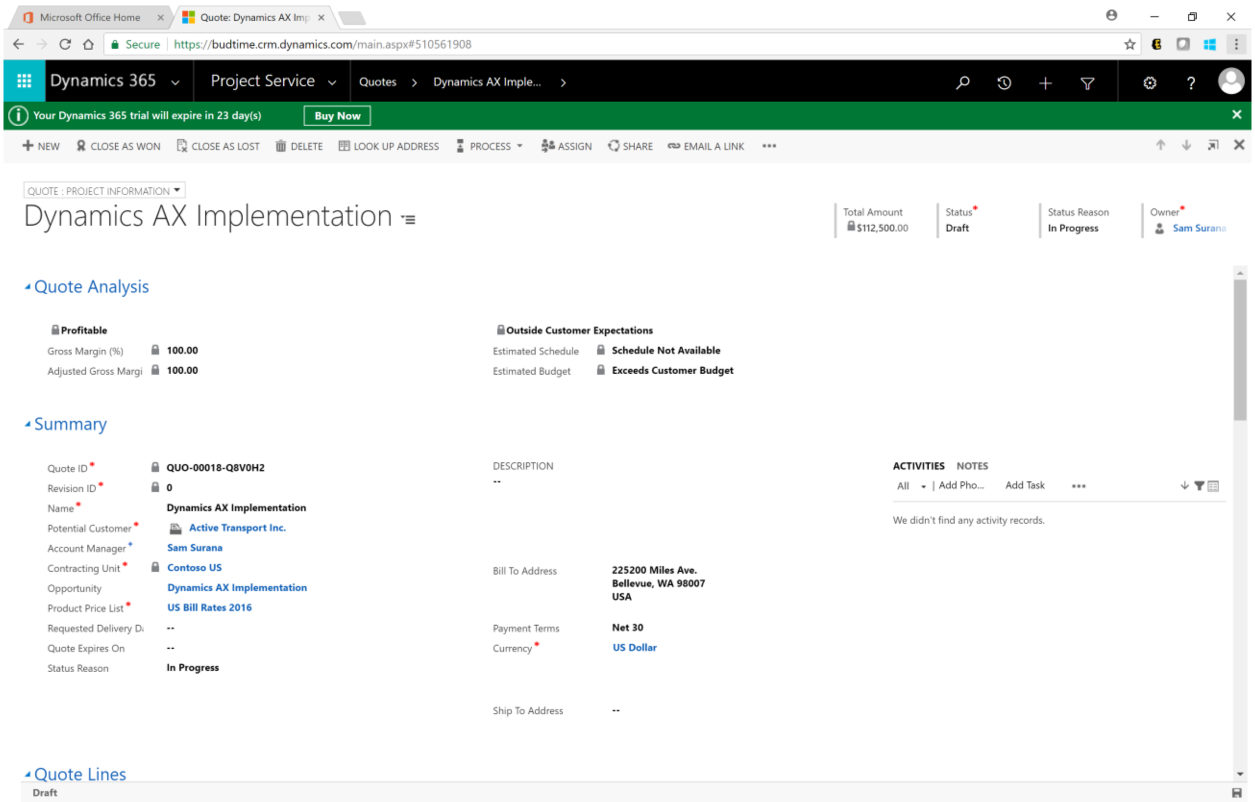


Now navigate back to the opportunity and add the product created to the opportunity, navigate to the product based lines and add the Dynamics AX Licenses with quantity of 50.


Microsoft Office Home
Opportunity: Dynamics A
Secure
https://budtime.crm.dynamics.com/main.aspx#819910735
Dynamics 365
Project Service
Opportunities
Dynamics AX Imple...
Your Dynamics 365 trial will expire in 23 day(s)
Buy Now
NEW
CLOSE AS WON
CLOSE AS LOST
CLOSE ALL QUOTES
RECALCULATE OPPORTUN...
CONVERT TO WORK ORDER
FORM
PROCESS
ASSIGN
OPPORTUNITY : PROJECT INFORMATION
Dynamics AX Implementation
Est. Close Date
--
Est. Revenue
$112,500.00
Status
In Progress
Owner
Sam Surana
Qualify (Active for 35 minutes)
Develop
Propose
Close
Product-based Lines
Product Name
Properties
Quantity
Unit
Sales Price
Sales Amount
Customer Budget
Dynamics AX Licenses
Edit
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.

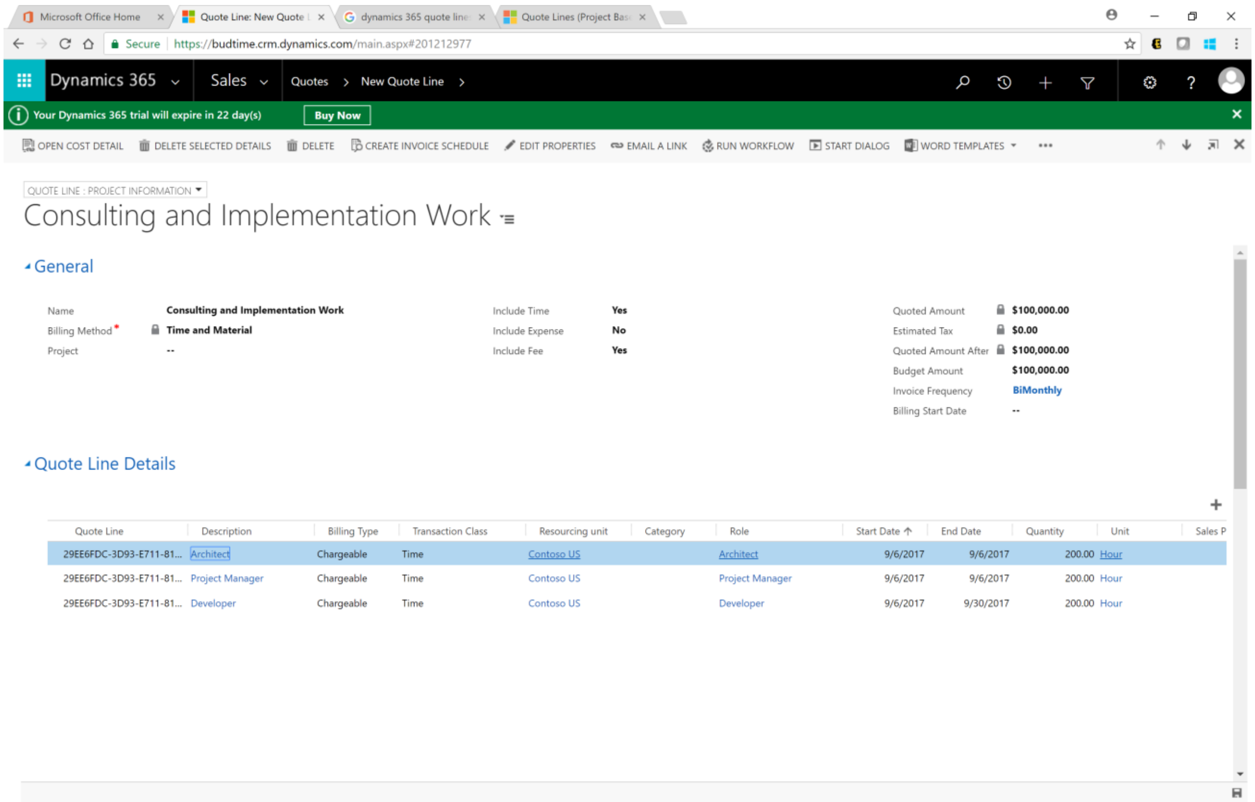


Go to the quote lines

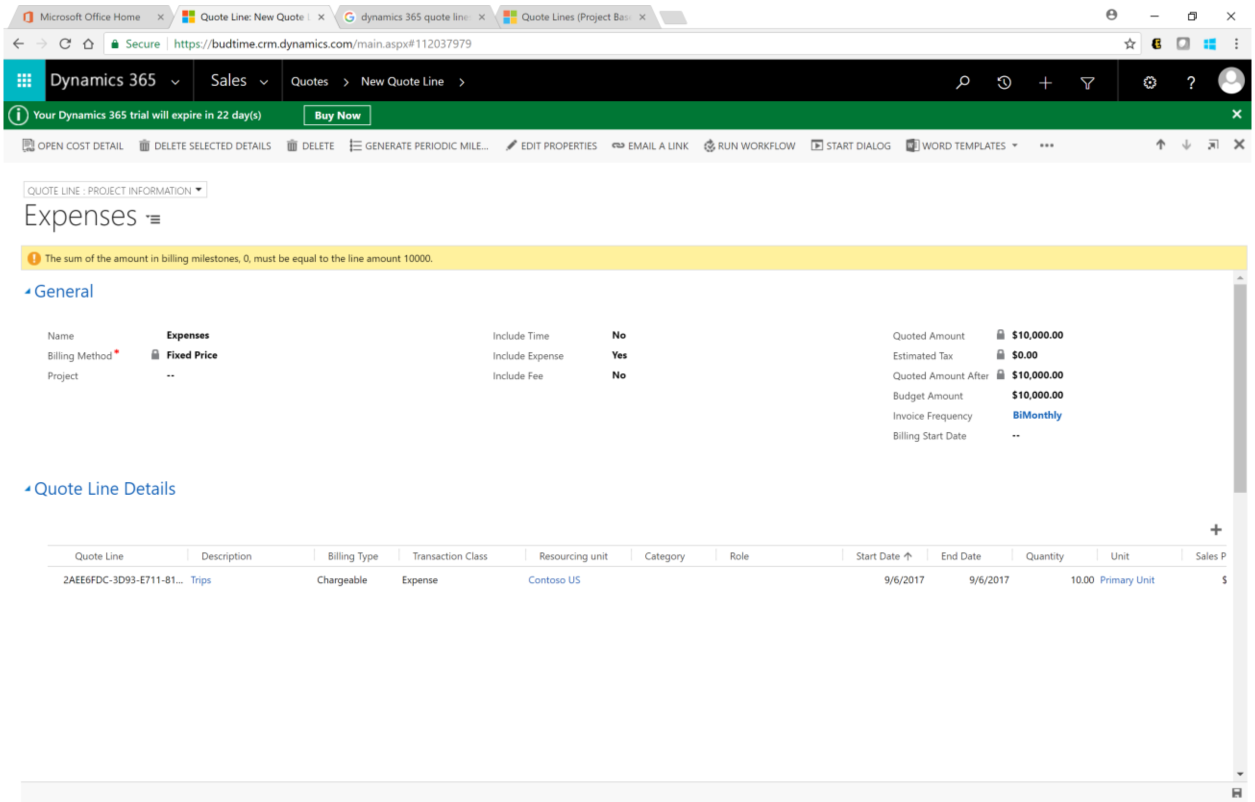
Open “consulting and implementation” and mark the include expense as No. This will make sure that expenses are not charged on this project.

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.

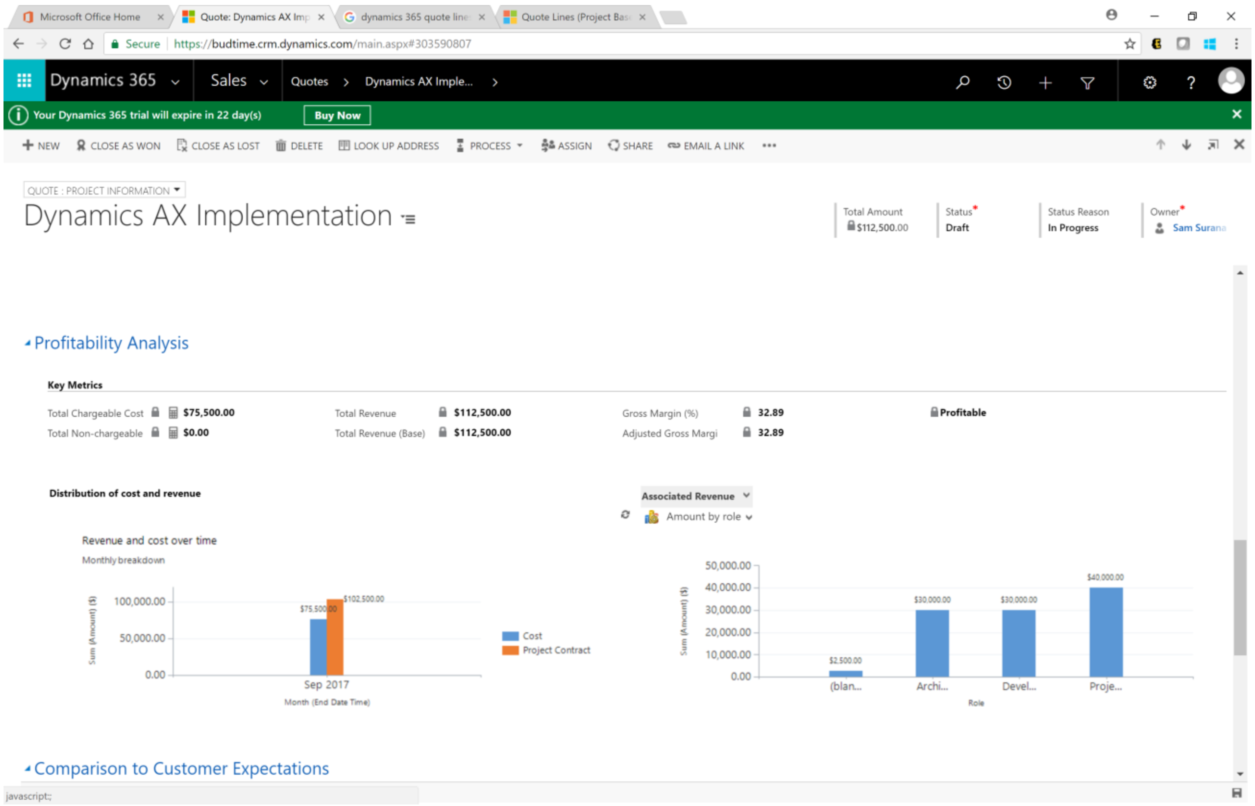
Open the Consulting and Implementation Quote line and create quote line details as shown below.



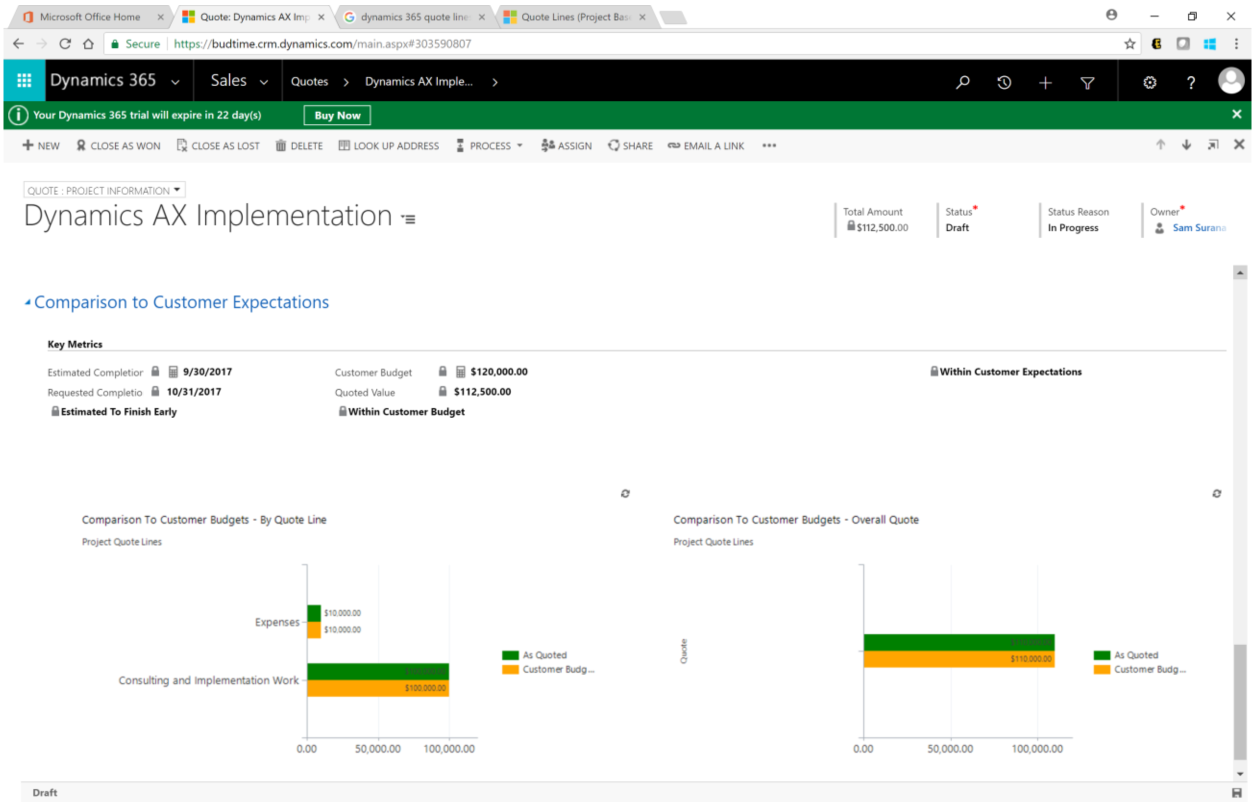
Open the Expenses quote line and create quote line details as shown below



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.

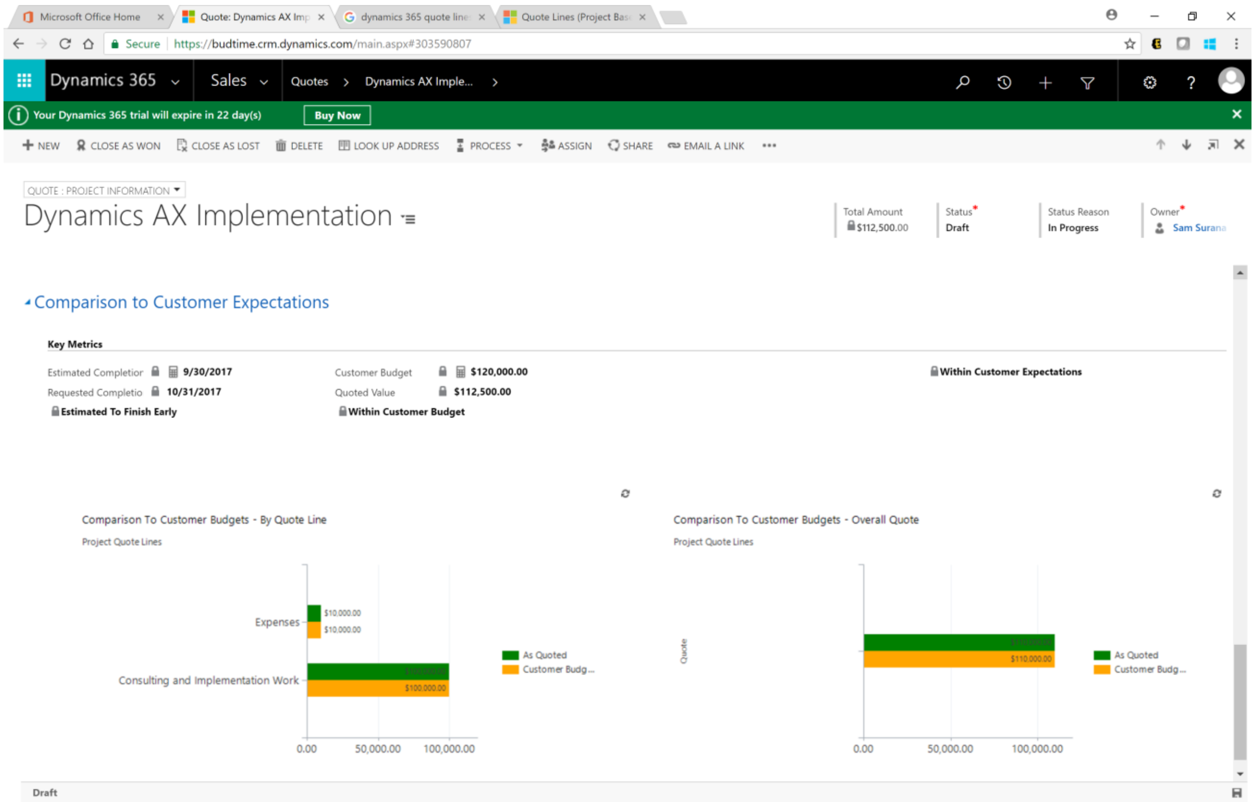


Now scroll to the “Comparison to Customer Expectations Section”

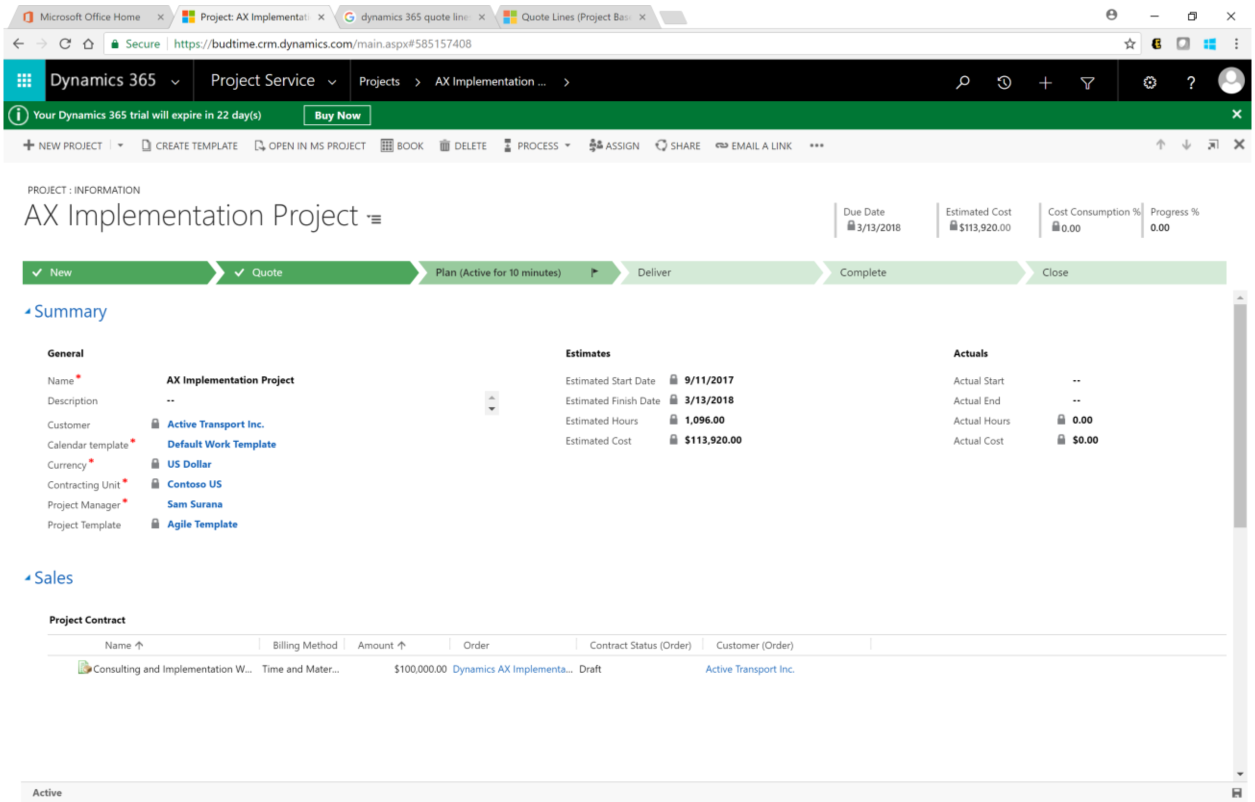


Now lets convert the quote to a contract or an order by marking it as Won. A project contract is created and all the fields from quote are copied to the order. This action also makes the quote as read only.

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.

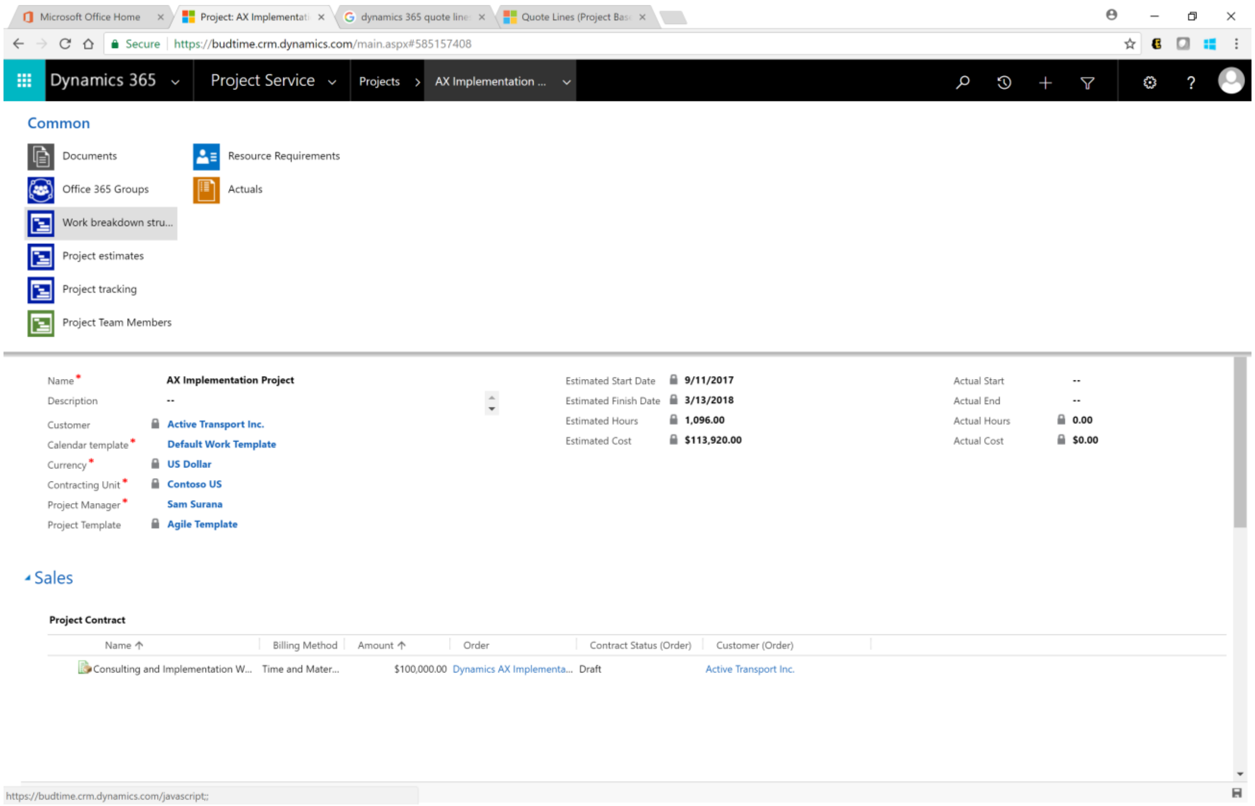


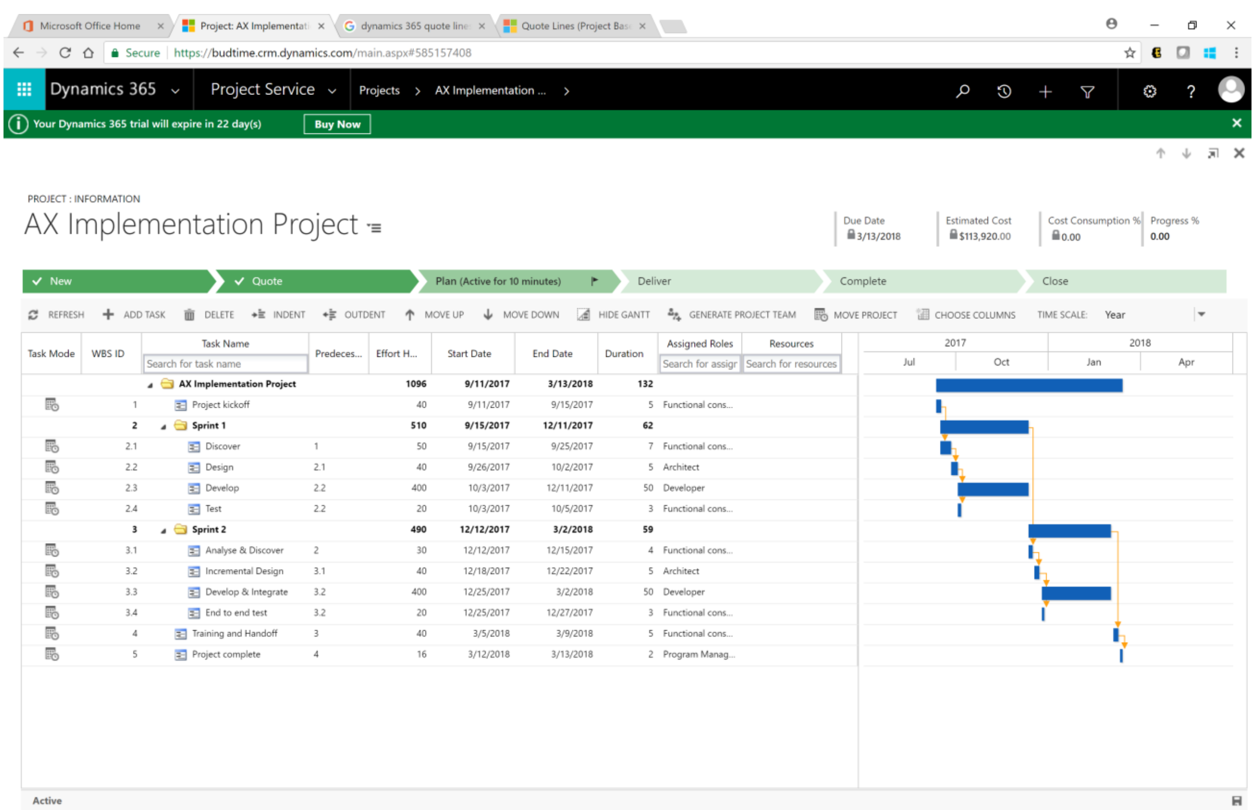
Now scroll down to the “Contract Lines” and click on the “Consulting & Implementation” in project based lines. See that the project field is blank. Click on it and create a new project. Enter the relevant details by selecting Project template as “Agile Template”.



Note that the Business process bar readily tells you which stage of the project you are at.

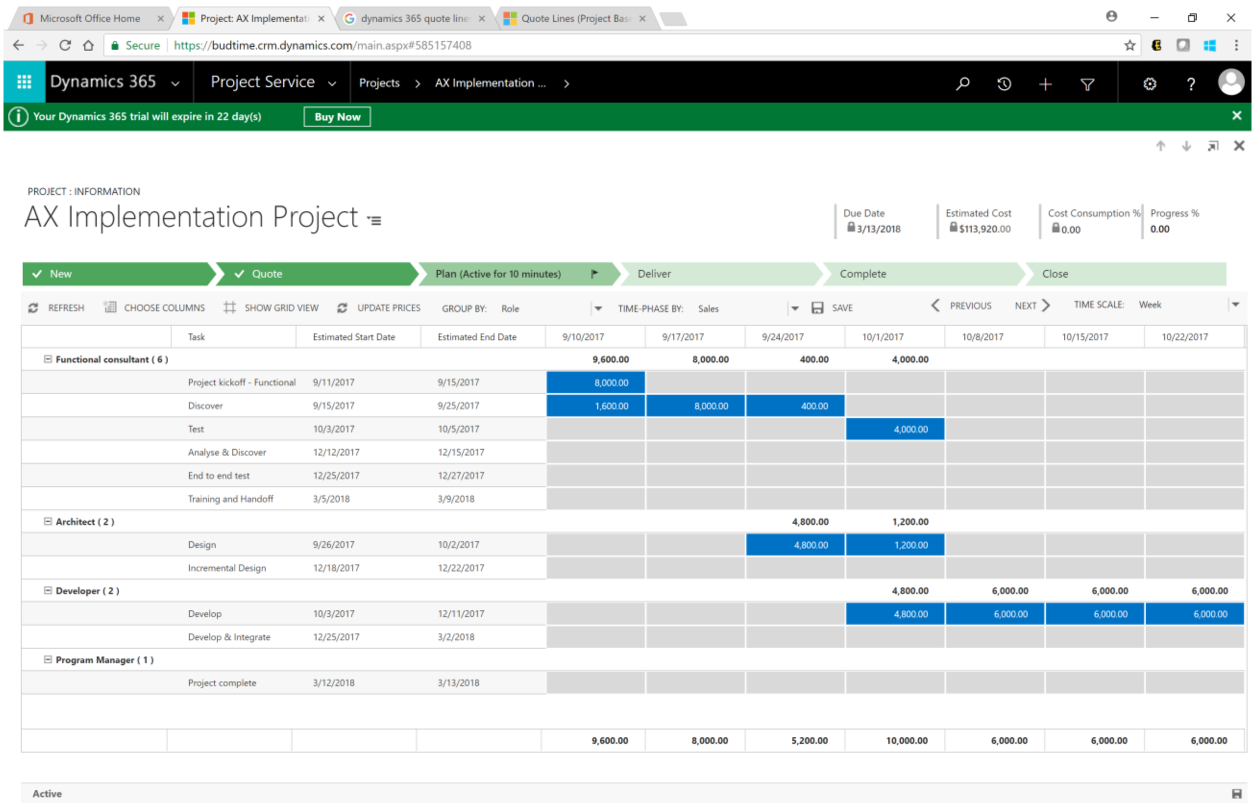
Now click on the Workbreak down structure in navigation. Give it a few seconds to load.


Microsoft Office Home
Project: AX Implementati
dynamics 365 quote line
Quote Lines (Project Bas
Secure https://budtime.crm.dynamics.com/main.aspx#585157408
Dynamics 365
Project Service
Projects
AX Implementation ...
Common
Documents
Resource Requirements
Office 365 Groups
Actuals
Work breakdown stru...
Project estimates
Project tracking
Project Team Members
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 Implementati
dynamics 365 quote line
Quote Lines (Project Bas
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
Predeces...
Effort H...
Start Date
End Date
Duration
Assigned Roles
Resources
Search for task name
Search for resources
2017
2018
Jul
Oct
Jan
Apr
AX Implementation Project 1096 9/11/2017 3/13/2018 132
1 Project kickoff 40 9/11/2017 9/15/2017 5 Functional cons...
2 Sprint 1 510 9/15/2017 12/11/2017 62
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 Sprint 2 490 12/12/2017 3/2/2018 59
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.



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

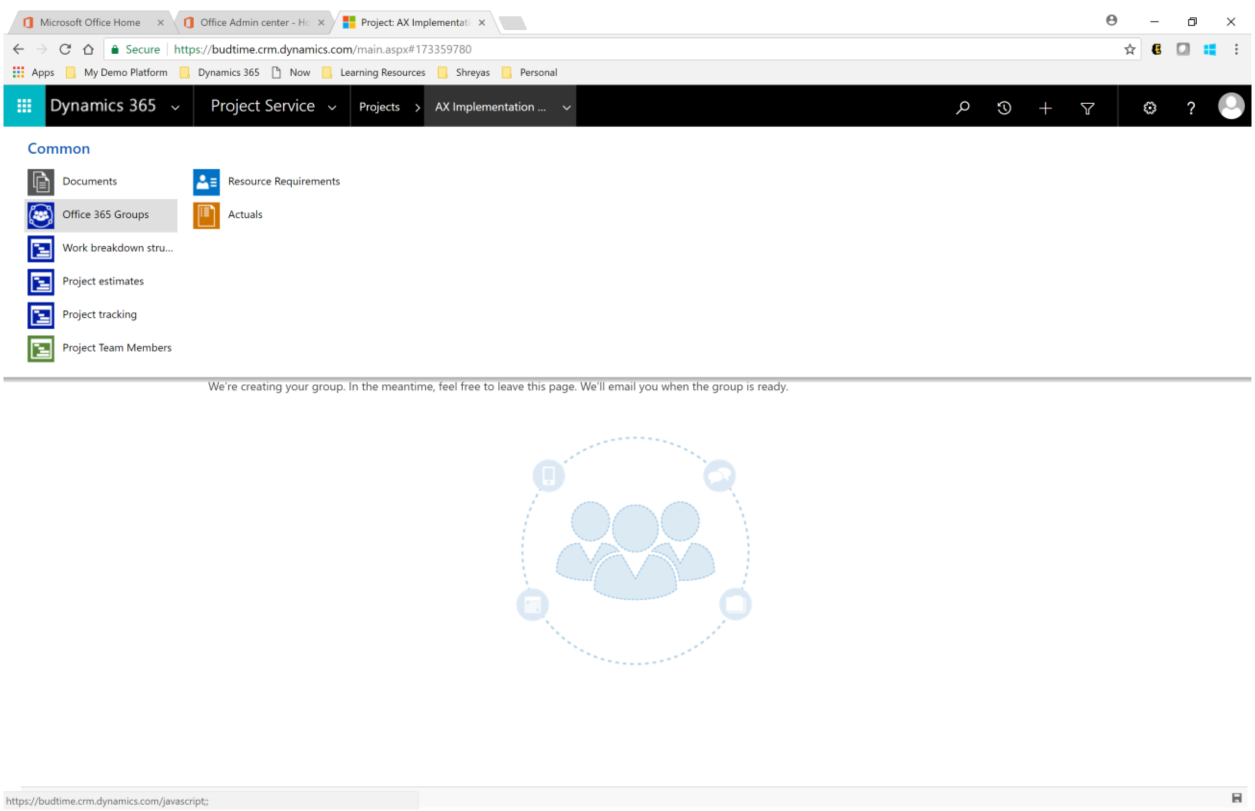
~~ TO BE ADDED LATER ~~

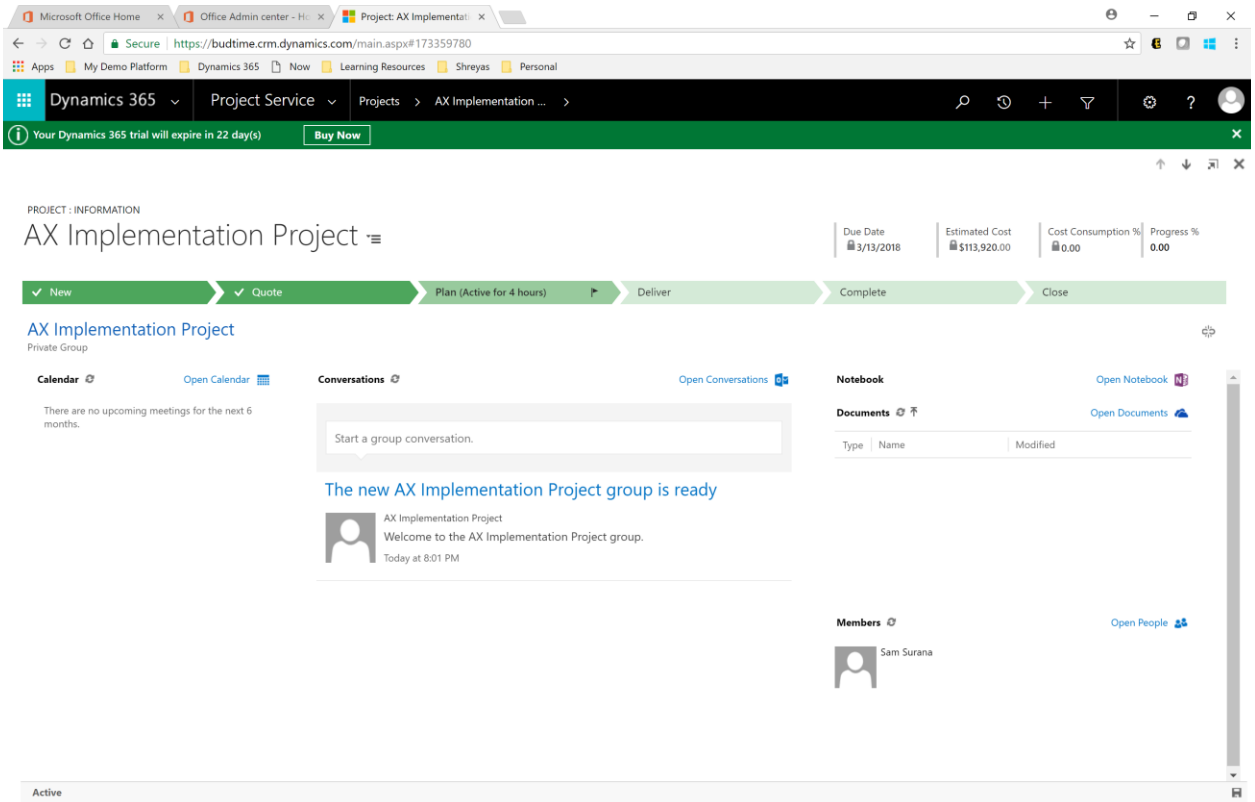
Office 365 Groups

Office Groups Setup

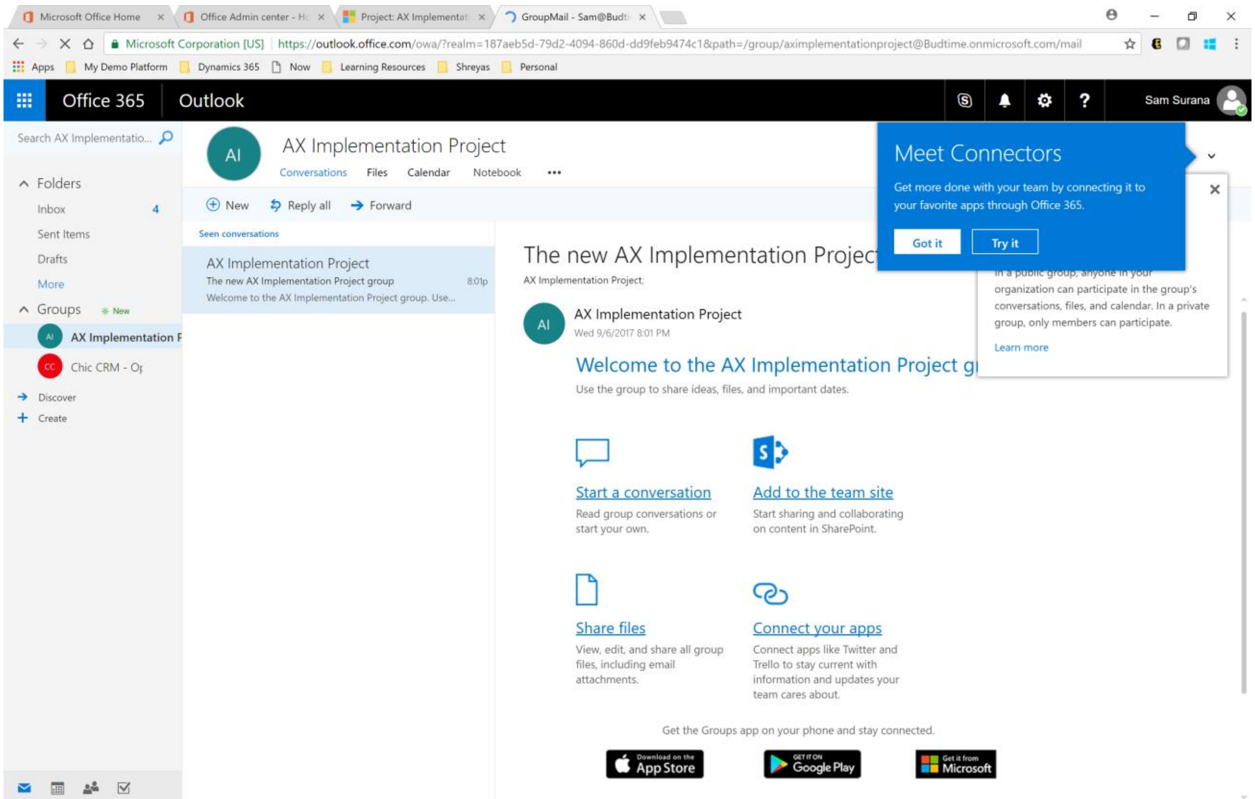
1. Install the "Office 365 Groups" solution from the O365 CRM Online Administration Center solutions management page
2. Once the solution installation is complete, in CRMOL, navigate to Settings > Office 365 Groups
    a. In the "Office 365 Groups Integration Settings" page, click on 'Add entity' button 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.





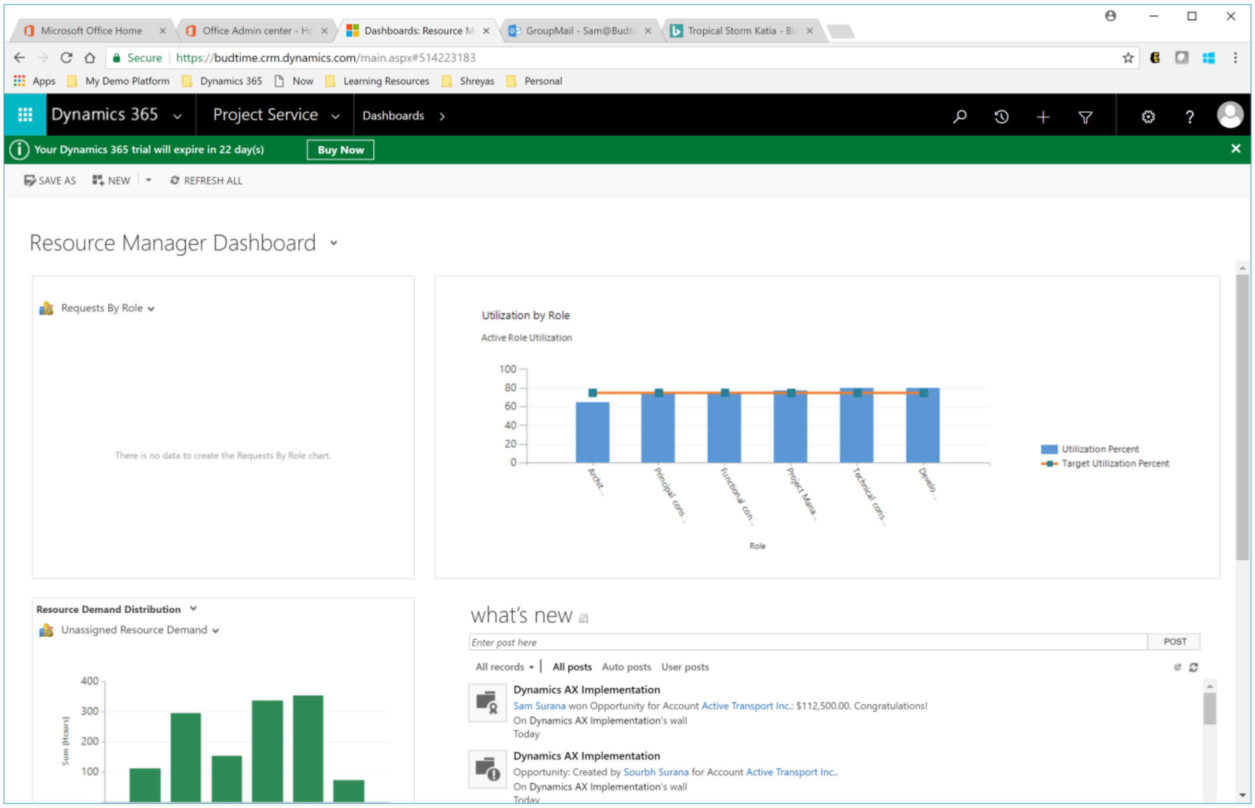
Here Dynamics 365 users can collaborate with Non-Dynamics 365 users. Non Dynamics 365 users can add or consume content from office 365.



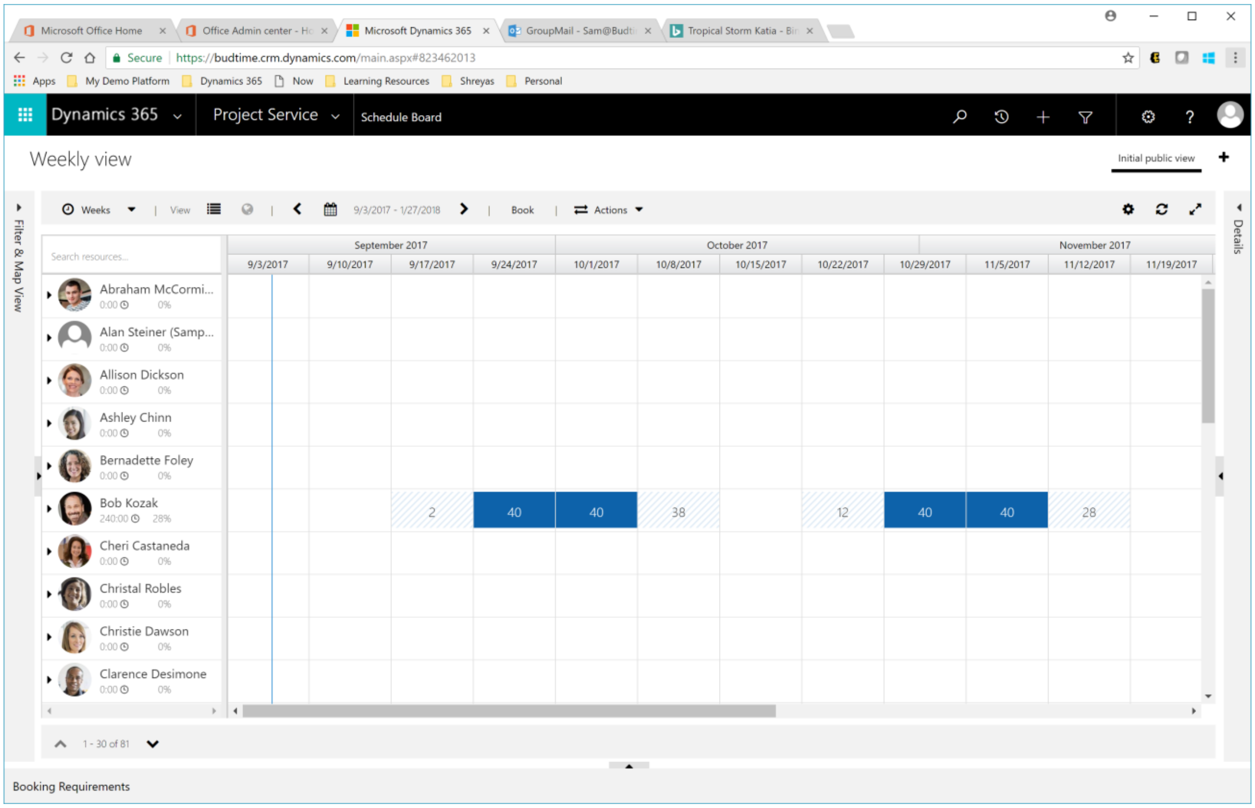
Office 365
Outlook
Sam Surana
AX Implementation Project
Conversations
Files
Calendar
Notebook
New
Reply all
Forward
Folders
Inbox
Sent Items
Drafts
More
Groups
New
AX Implementation P
Chic CRM - Op
Discover
Create
Seen conversations
AX Implementation Project
The new AX Implementation Project group
Welcome to the AX Implementation Project group. Use...
Meet Connectors
Get more done with your team by connecting it to your favorite apps through Office 365.
Got it
Try it
The new AX Implementation Project
AX Implementation Project
Wed 9/6/2017 8:01 PM
Welcome to the AX Implementation Project g
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.
organization can participate in the group's conversations, files, and calendar. In a private group, only members can participate.
Learn more
Get the Groups app on your phone and stay connected.
App Store
Google Play
Microsoft

Resource Management

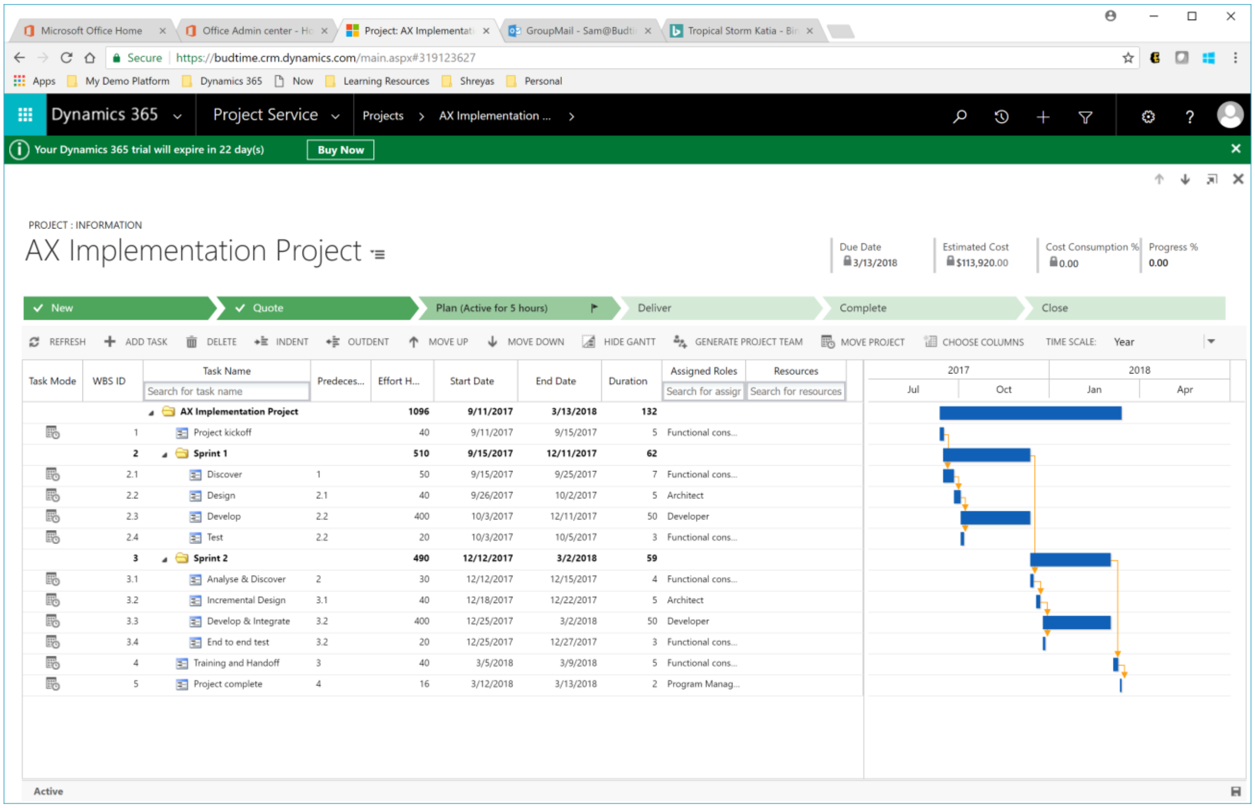
Resource Management Dashboard



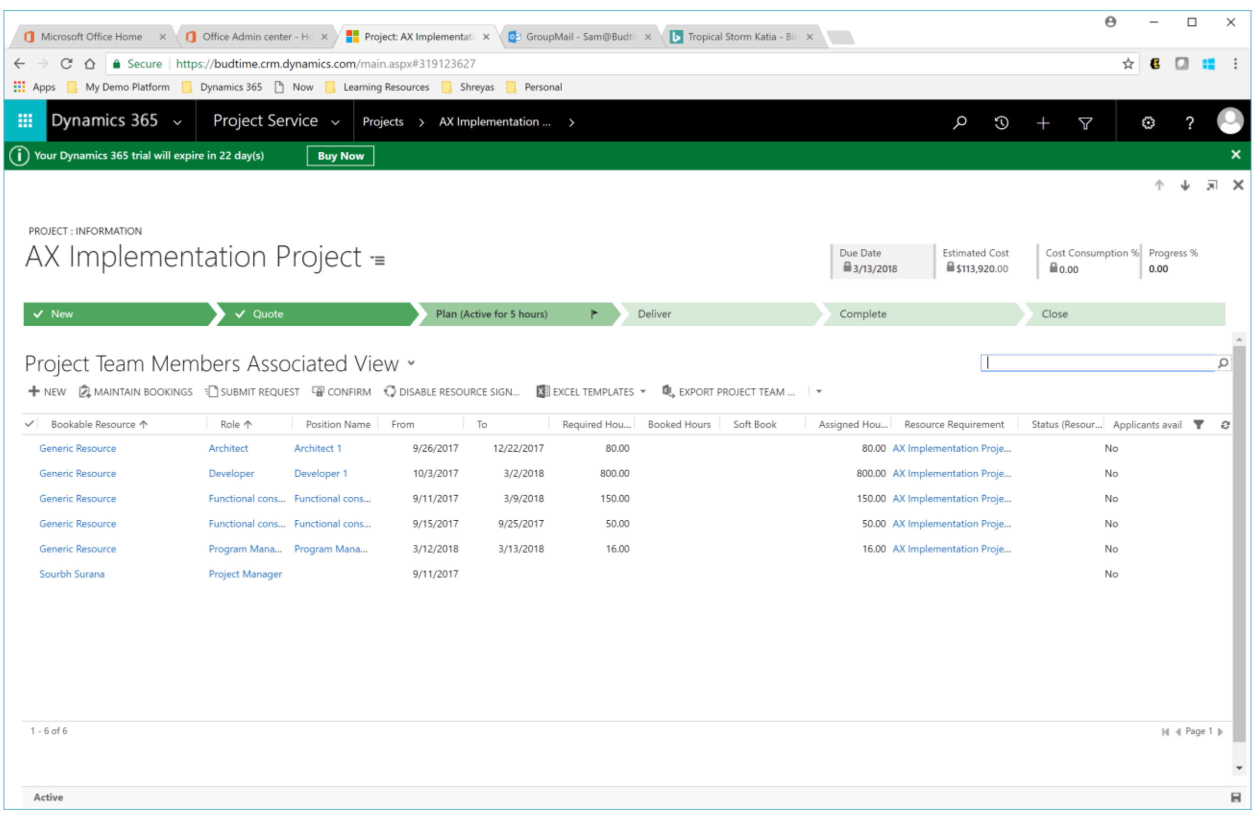
Go to Project service → Schedule board. This tool gives you ability to see resources.



Open the AX Implementation Project and go to WBS.

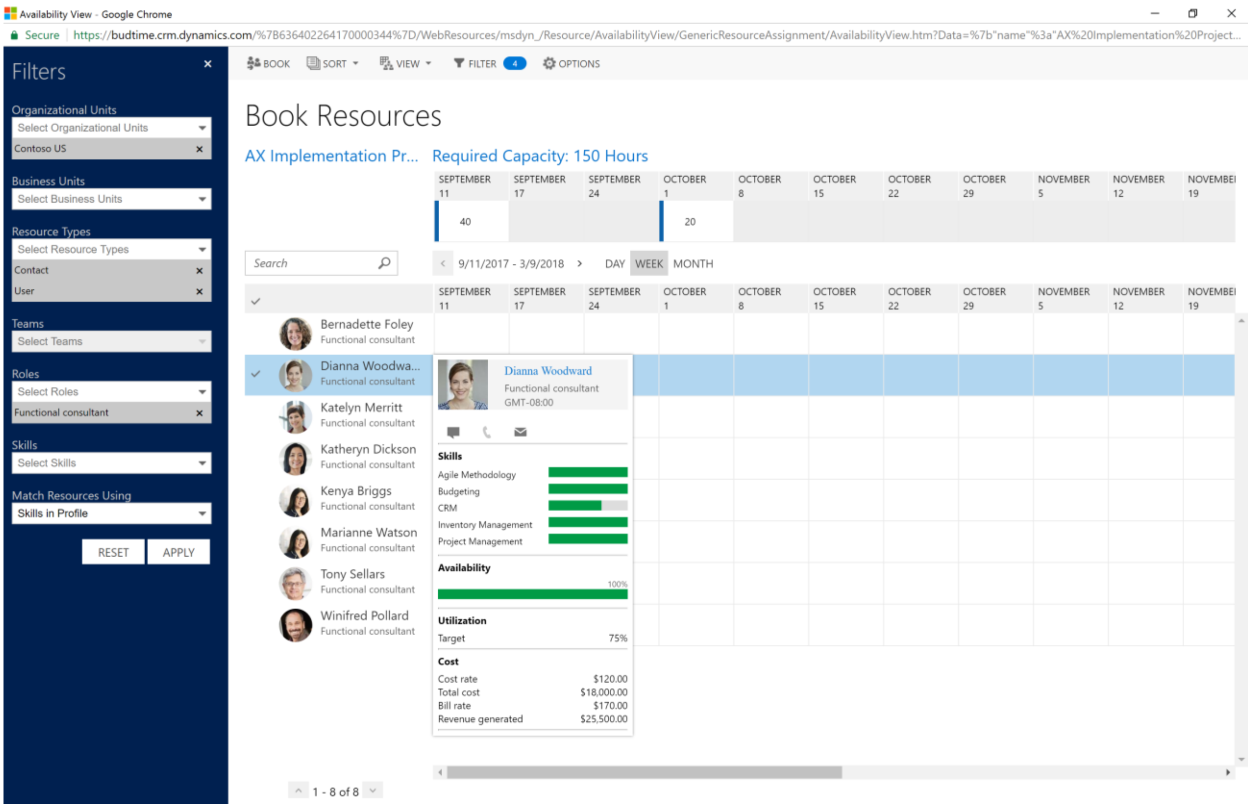


Click on “Generate Project Team”. This will generate team with generic resources.

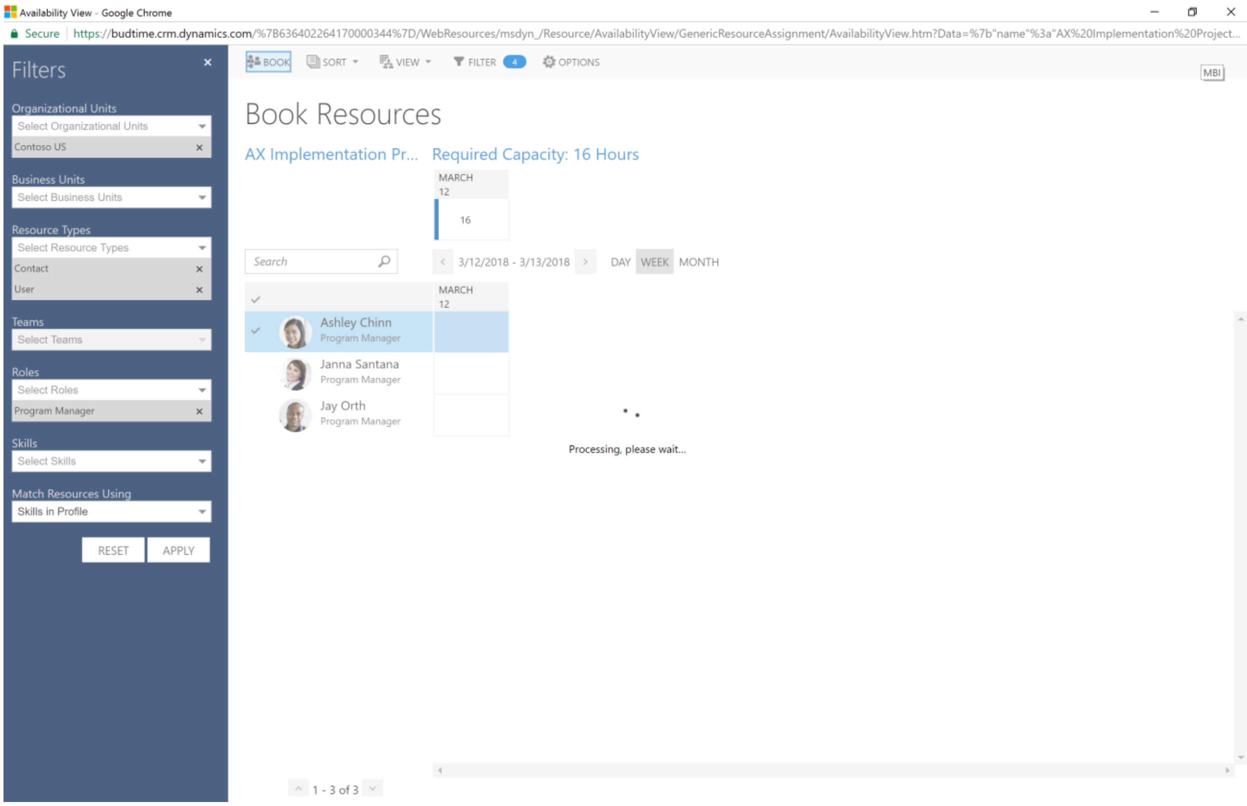


Now click on “Hard Book”. This opens Book Resources Dashboard.

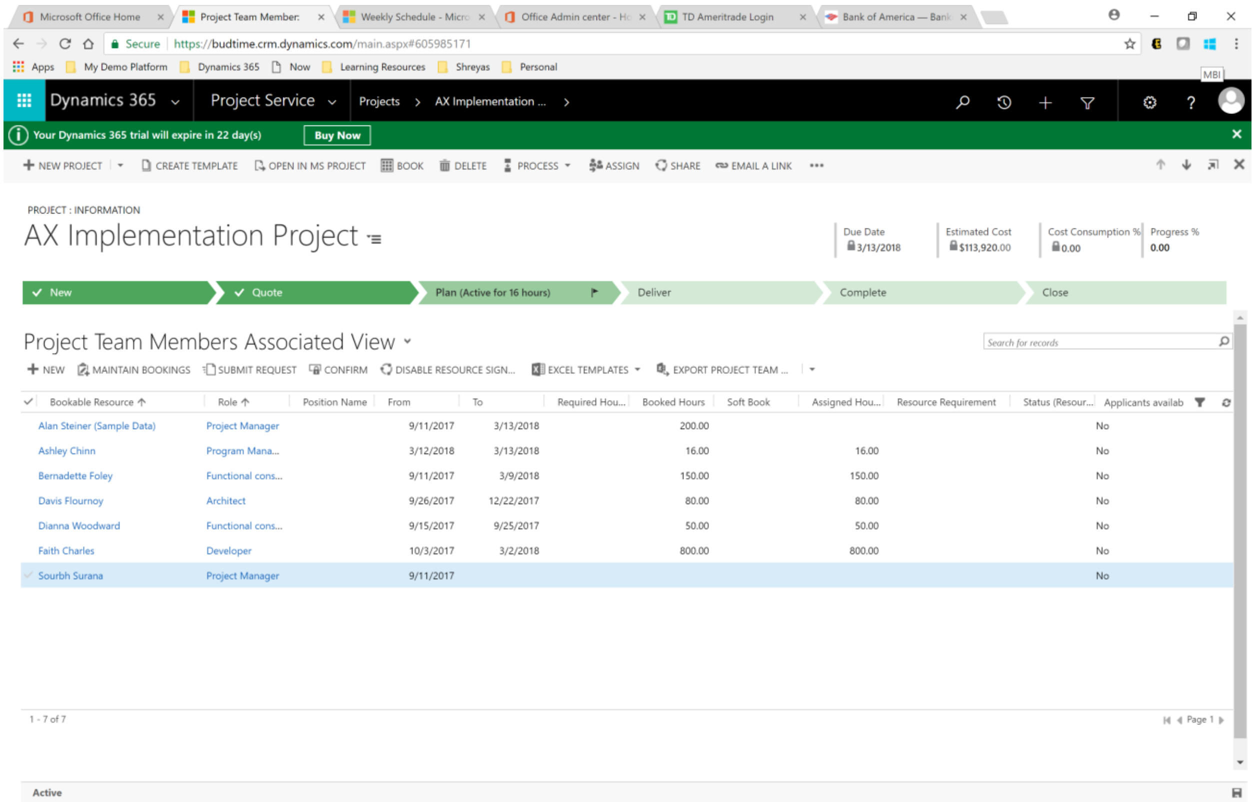
Here we can see who is free, compare resources, sort & filter and book the resource.



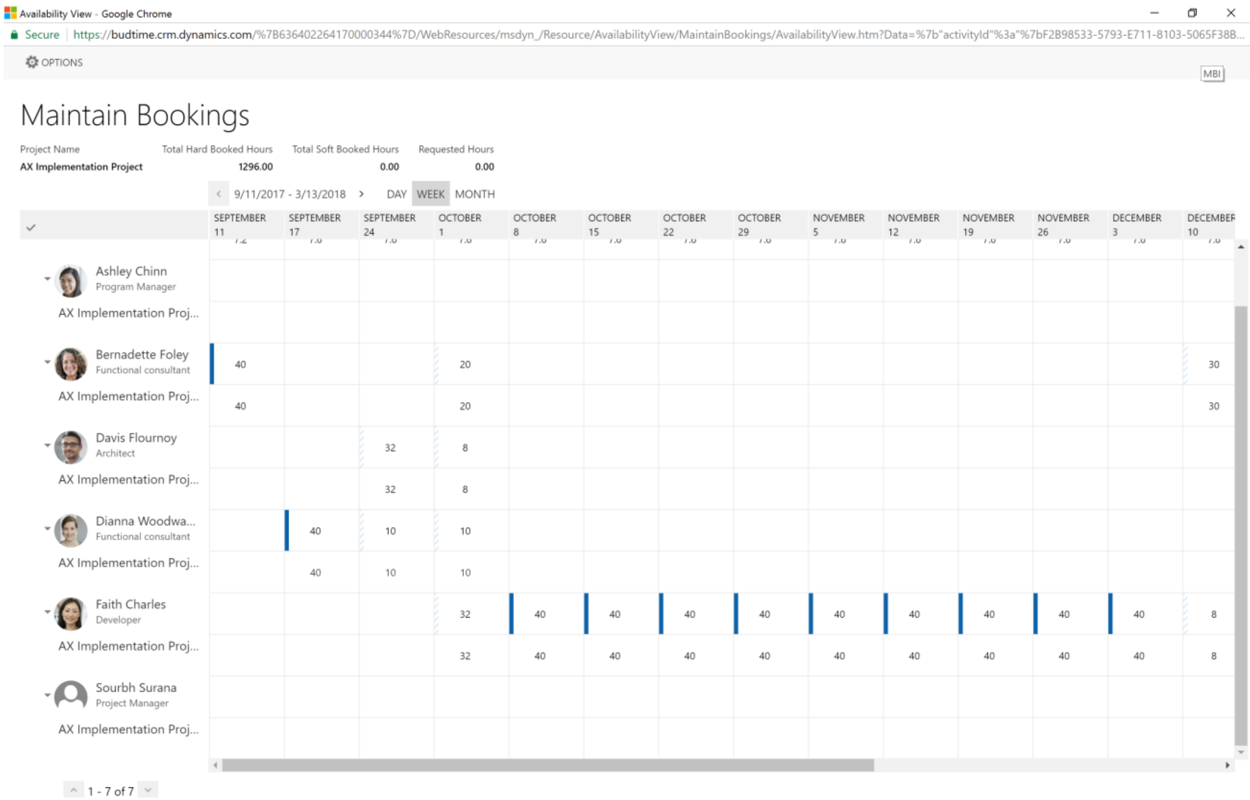
Book all the resources based on the relevant filter criteria.



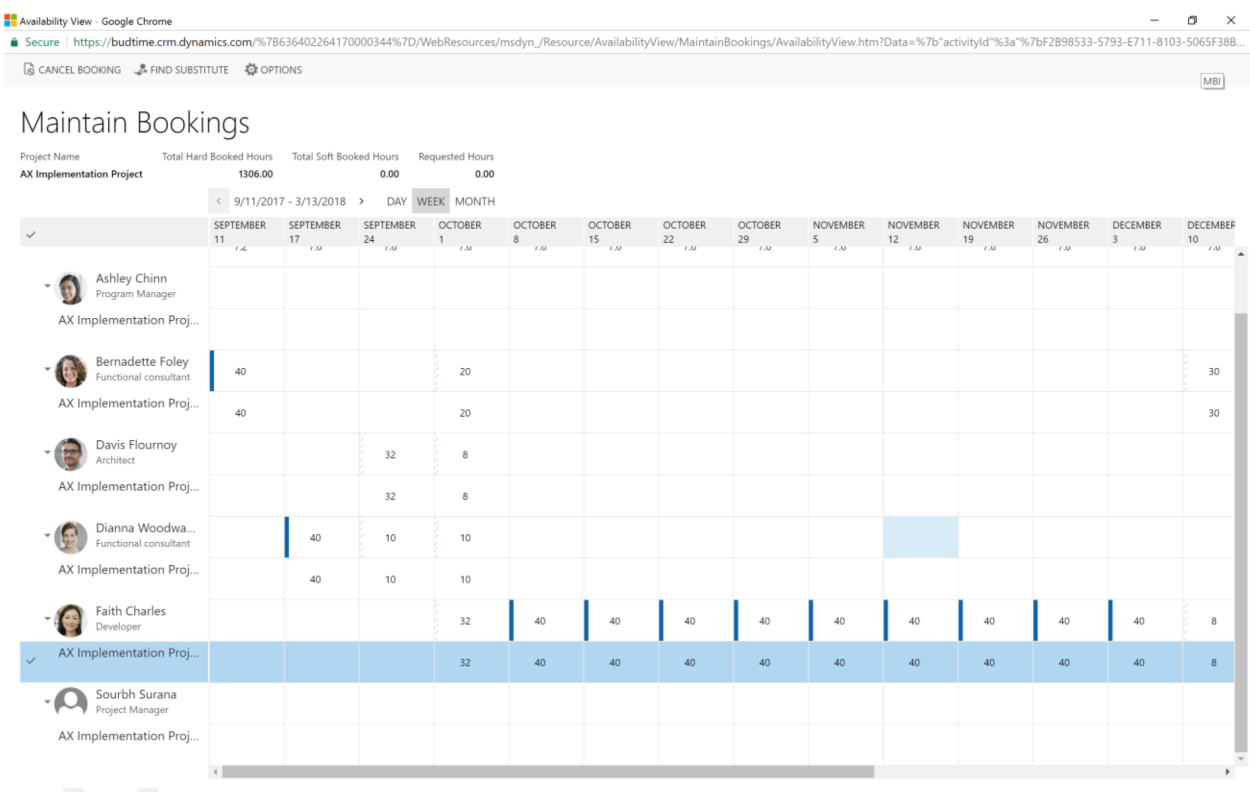
I have booked them as follows.



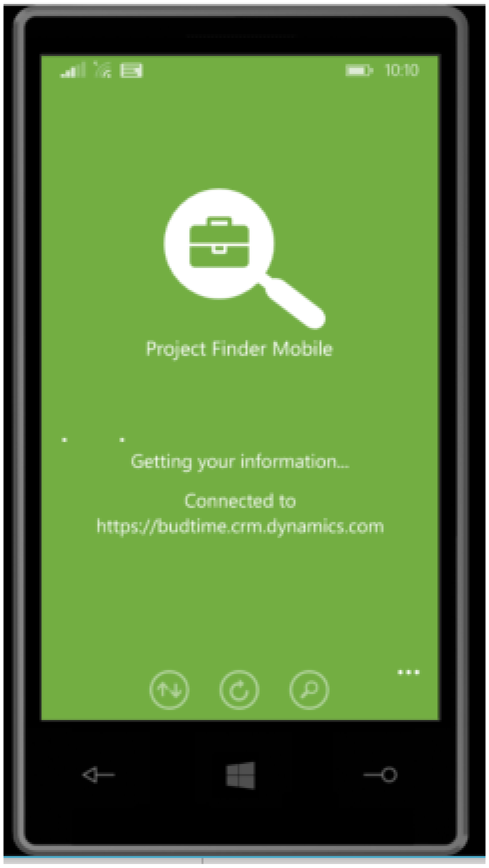
Now I want to see if Functional consultant Dianna's booking is correct or not. I can then click on the "Maintain Booking" and make some adjustments.

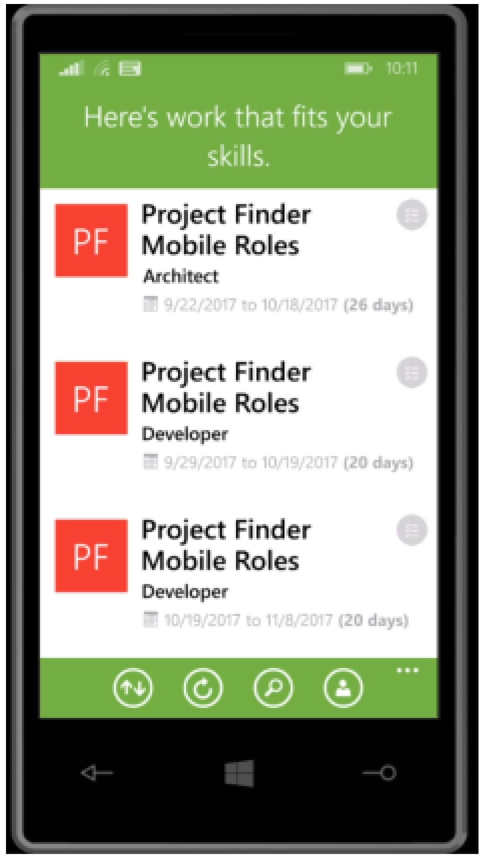


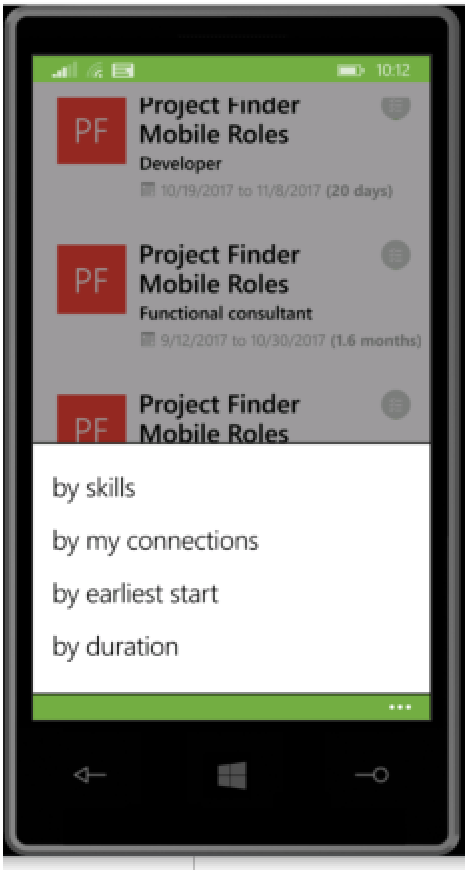
You can also substitute a resource. Click on "Faith", you will see a button for substituting a resource. We don't execute it right now but good to know about the functionality.

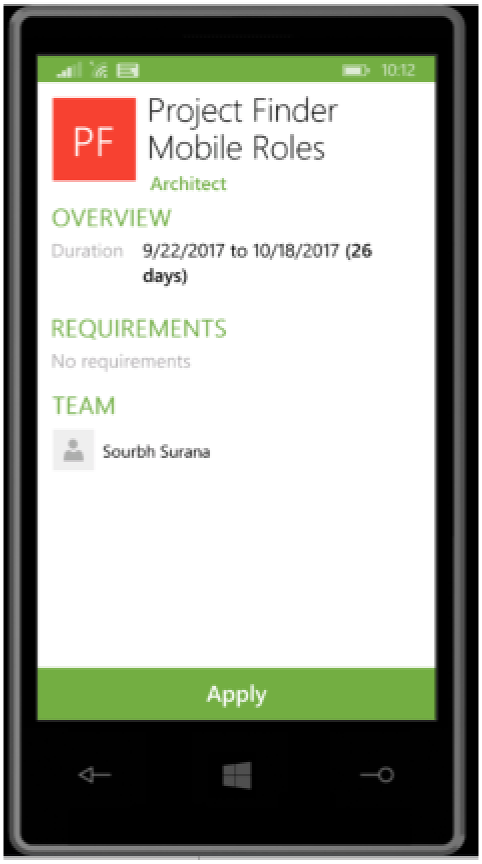


An applicant can use “Project Finder mobile app” to apply for the Job based on skill, connections, earliest start etc. The application is then routed to the project manager for approval. Once the project manager approves it the applicant becomes the part of the team. The project finder mobile app is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


10:10
Project Finder Mobile
Getting your information...
Connected to
https://budtime.crm.dynamics.com

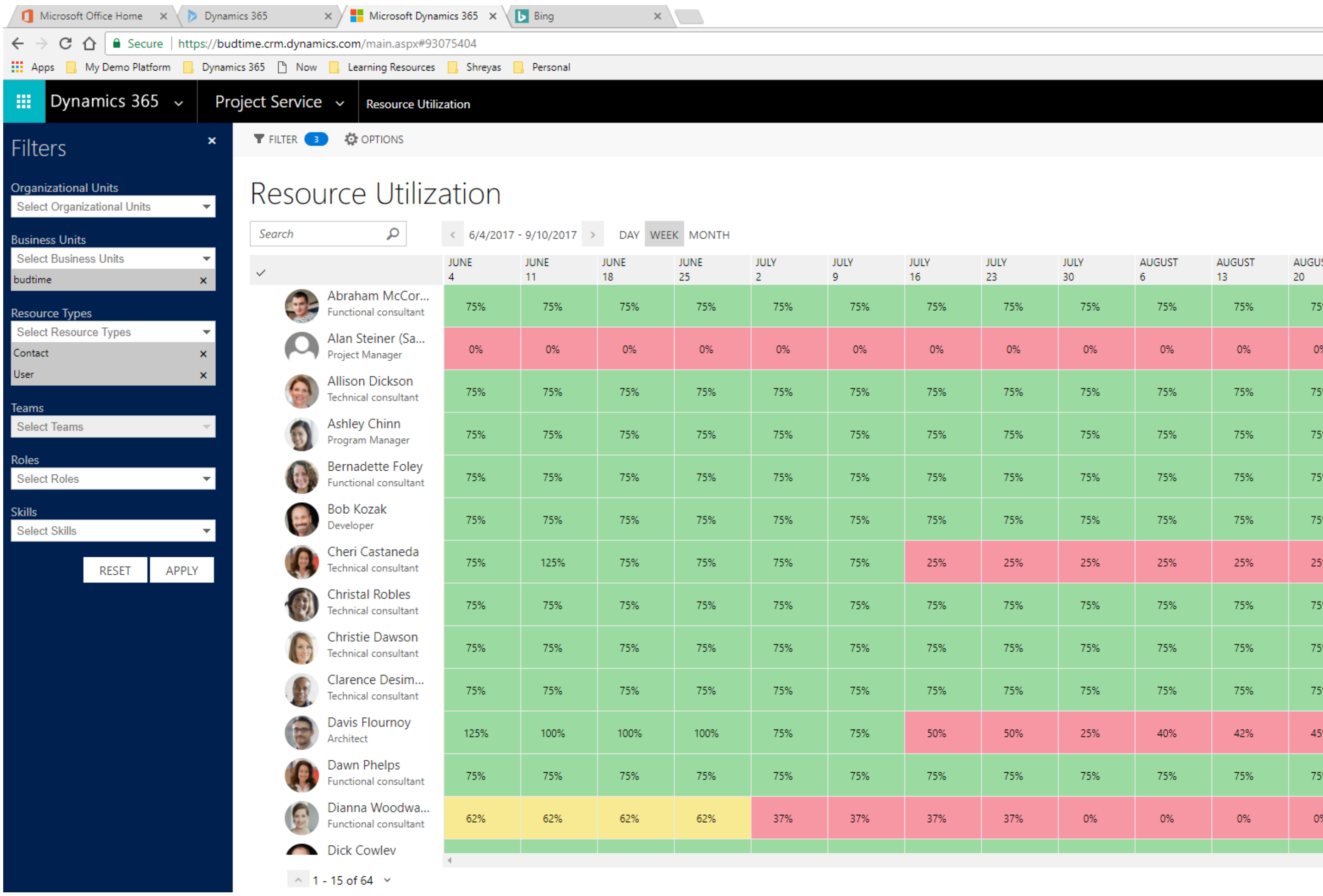

10:11
Here's work that fits your skills.
PF
Project Finder Mobile Roles
Architect
9/22/2017 to 10/18/2017 (26 days)
PF
Project Finder Mobile Roles
Developer
9/29/2017 to 10/19/2017 (20 days)
PF
Project Finder Mobile Roles
Developer
10/19/2017 to 11/8/2017 (20 days)


10:12
Project Finder
Mobile Roles
Developer
10/19/2017 to 11/8/2017 (20 days)
Project Finder
Mobile Roles
Functional consultant
9/12/2017 to 10/30/2017 (1.6 months)
Project Finder
Mobile Roles
by skills
by my connections
by earliest start
by duration



Resource Utilization

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

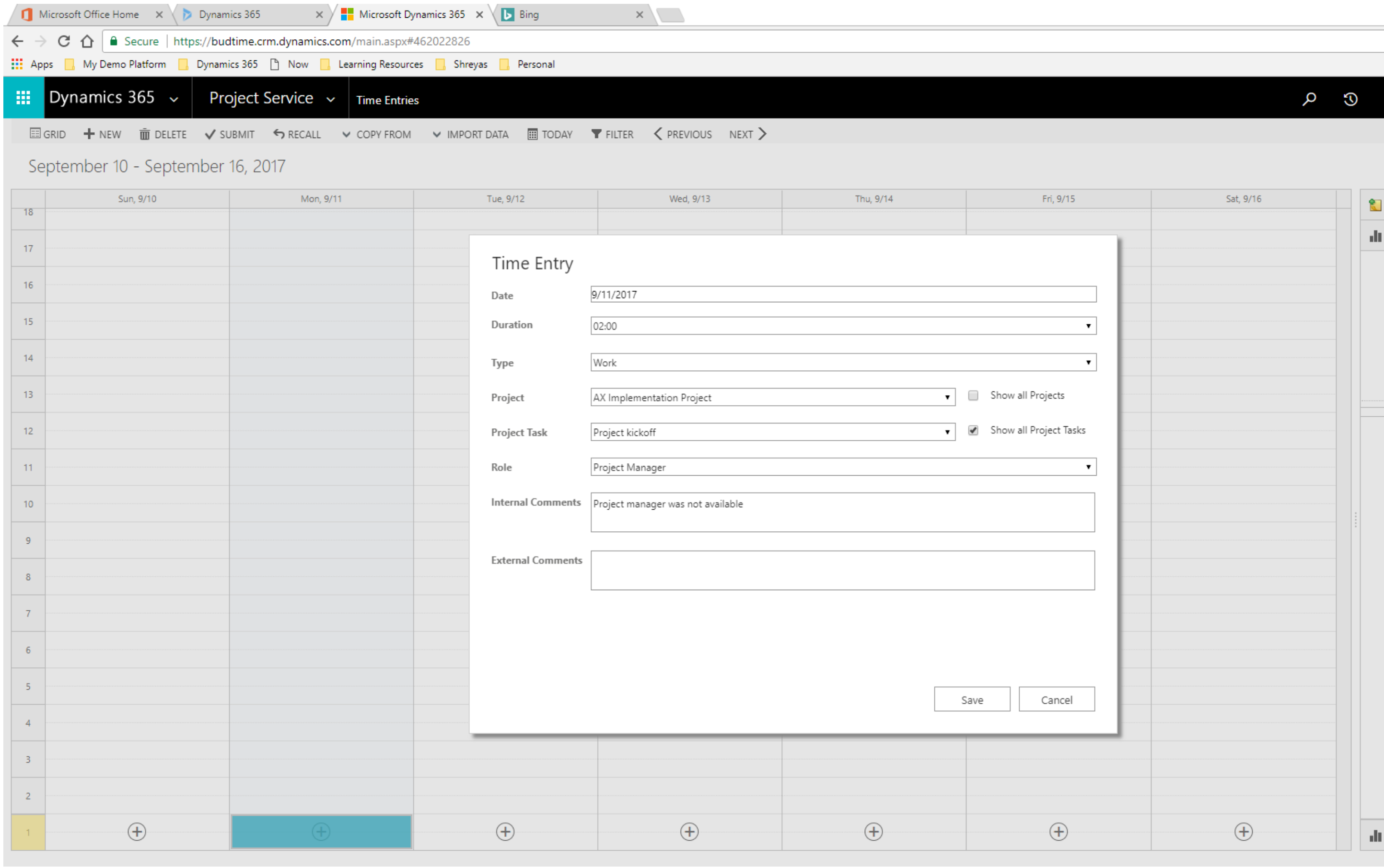

Microsoft Office Home
Dynamics 365
Microsoft Dynamics 365
Bing
Secure
https://budtime.crm.dynamics.com/main.aspx#93075404
Apps
My Demo Platform
Dynamics 365
Now
Learning Resources
Shreyas
Personal
Dynamics 365
Project Service
Resource Utilization
Filters
Organizational Units
Select Organizational Units
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
Abraham McCor...
Functional consultant
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%
Allison Dickson
Technical consultant
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%
Bernadette Foley
Functional consultant
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%
Cheri Castaneda
Technical consultant
75% 125% 75% 75% 75% 75% 25% 25% 25% 25% 25%
Christal Robles
Technical consultant
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%
Clarence Desim...
Technical consultant
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%
Dawn Phelps
Functional consultant
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%
Dick Cowley
1 - 15 of 64

Time and Expense Approval

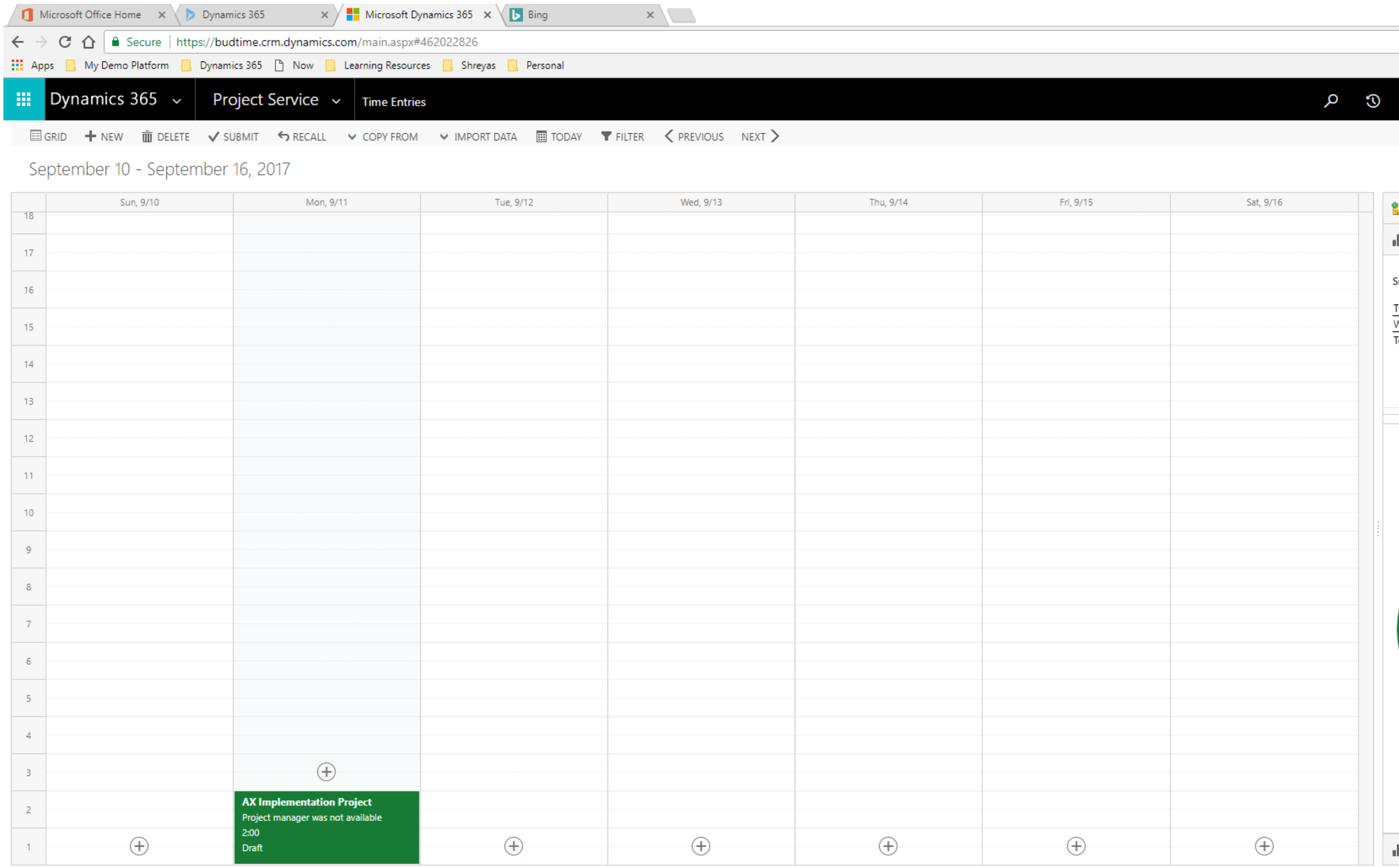
Here you can record and modify Time Entry.

Time Entry

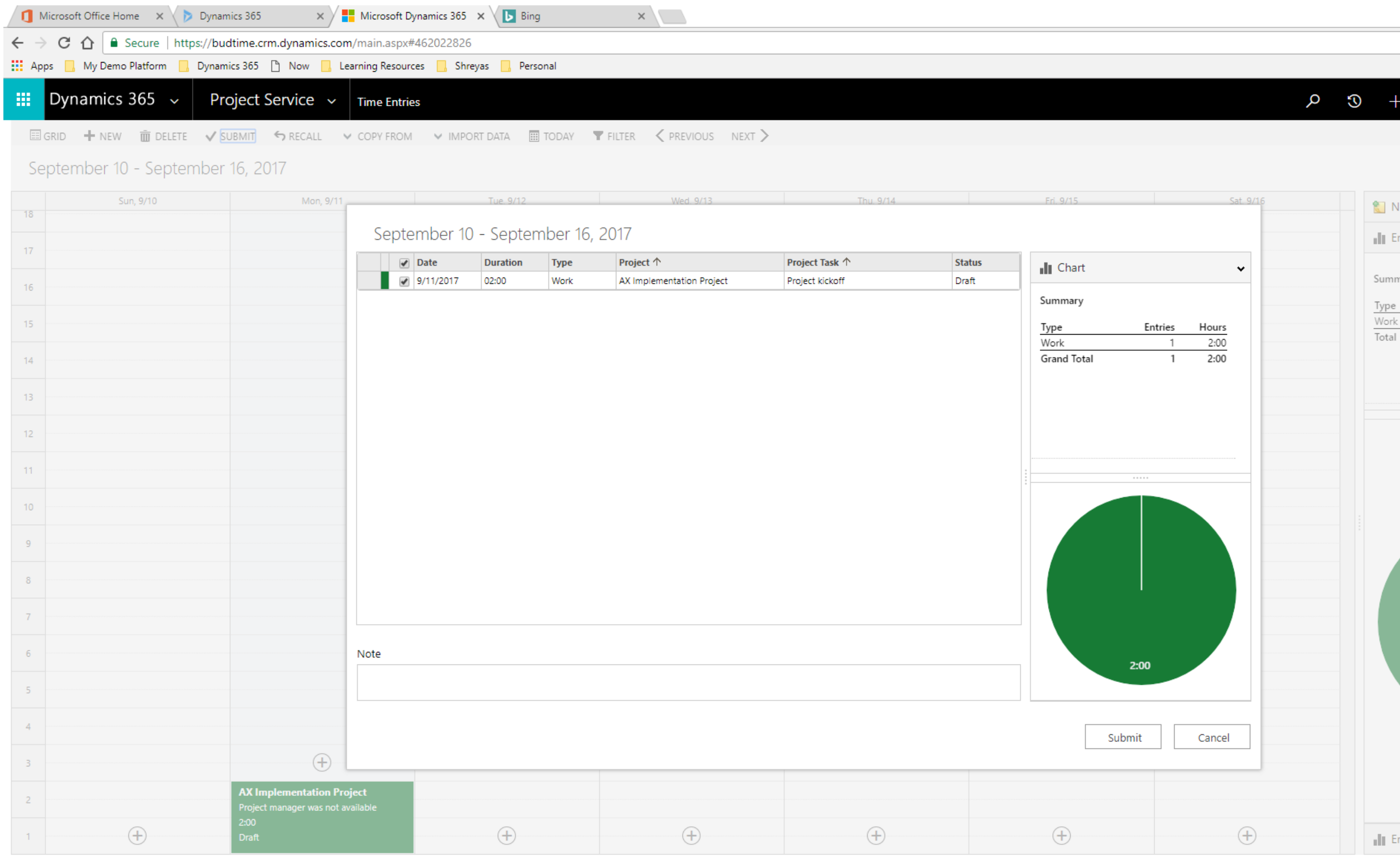
Click on Project Service → My Work → Time Entries then click on the + sign below the day you want to enter the time for.



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.

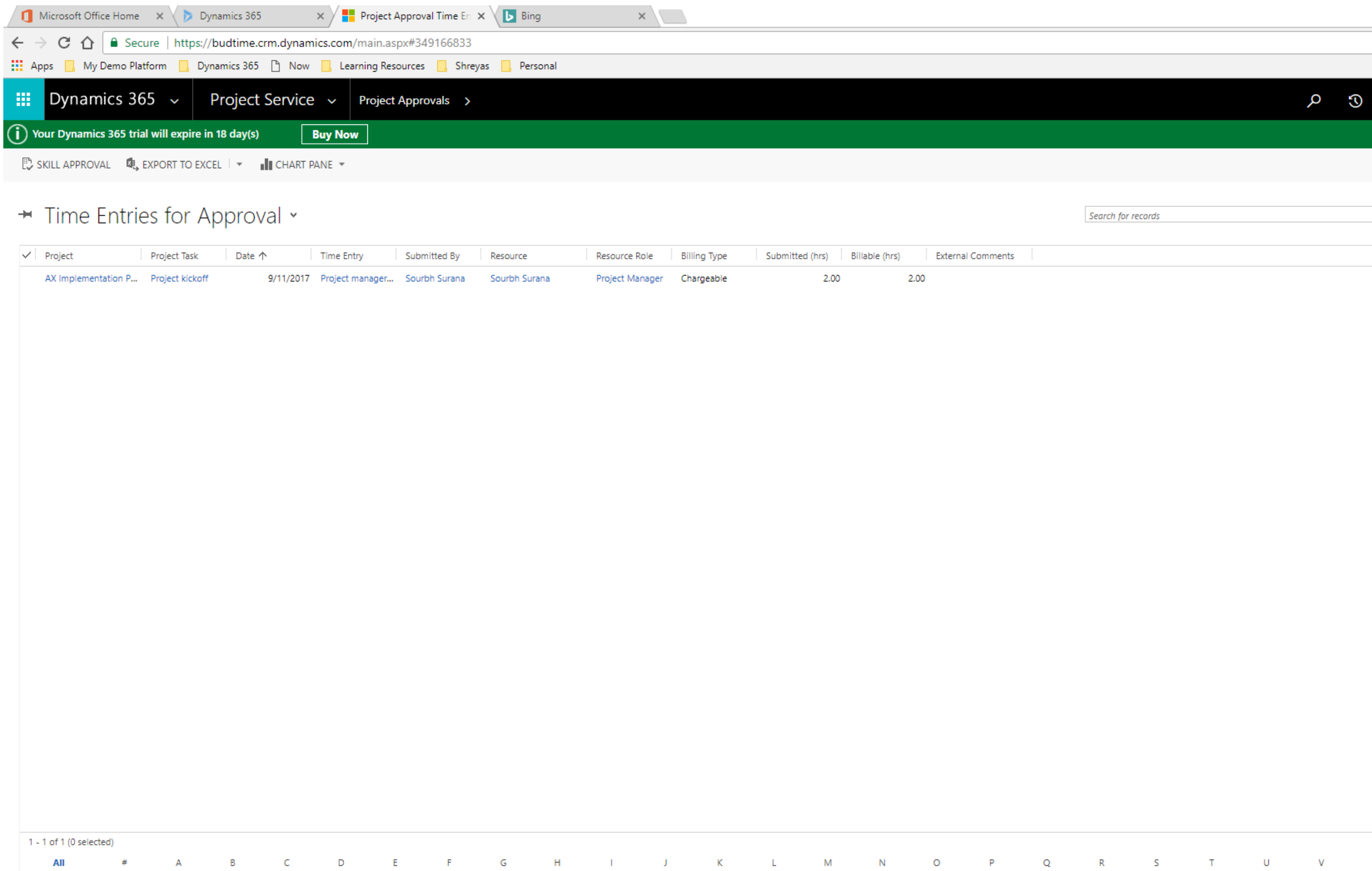


Now you can hit submit to submit the Time entry for approval.

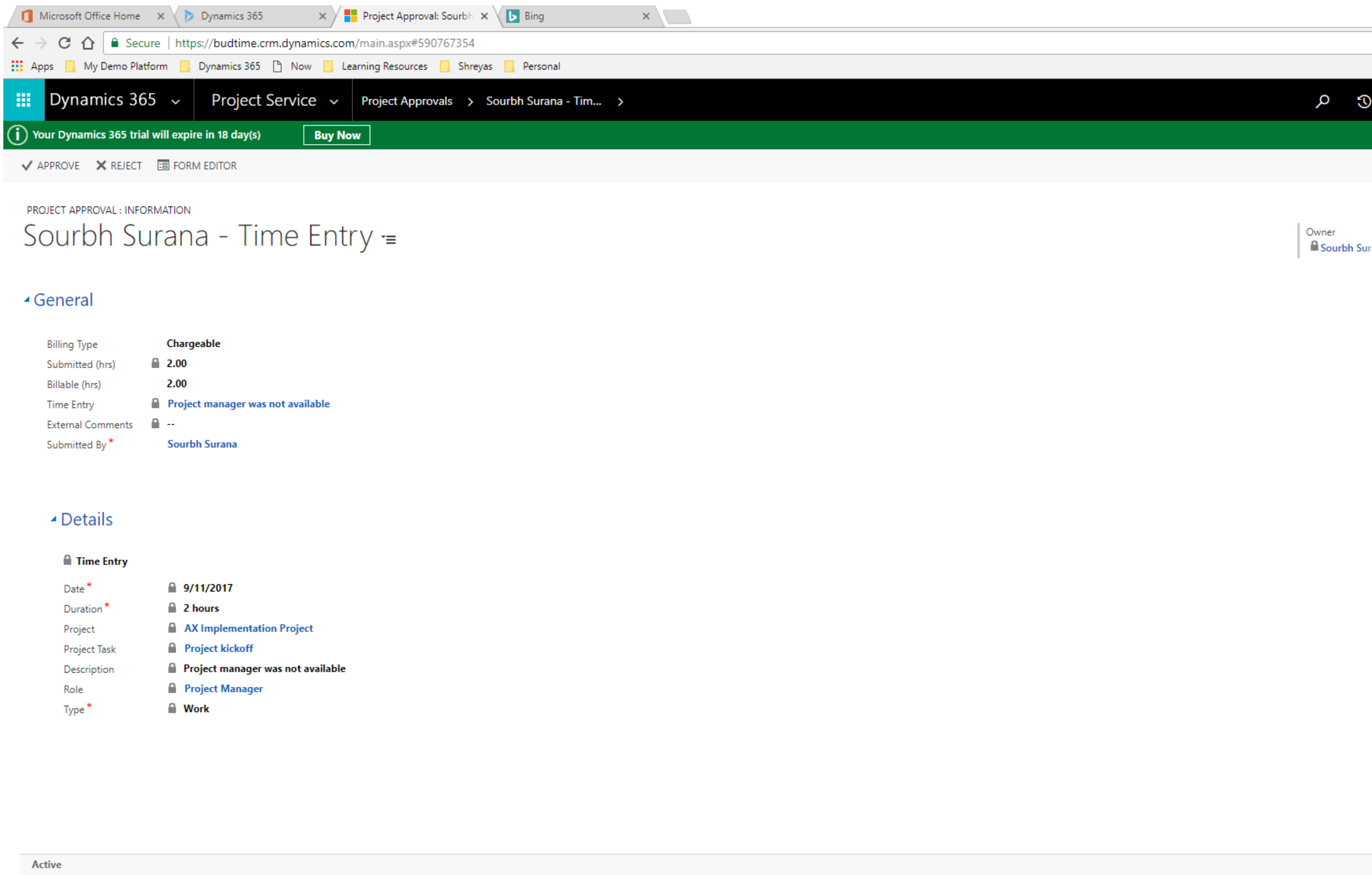


Project manager can now look at the entries and approve the entry.

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



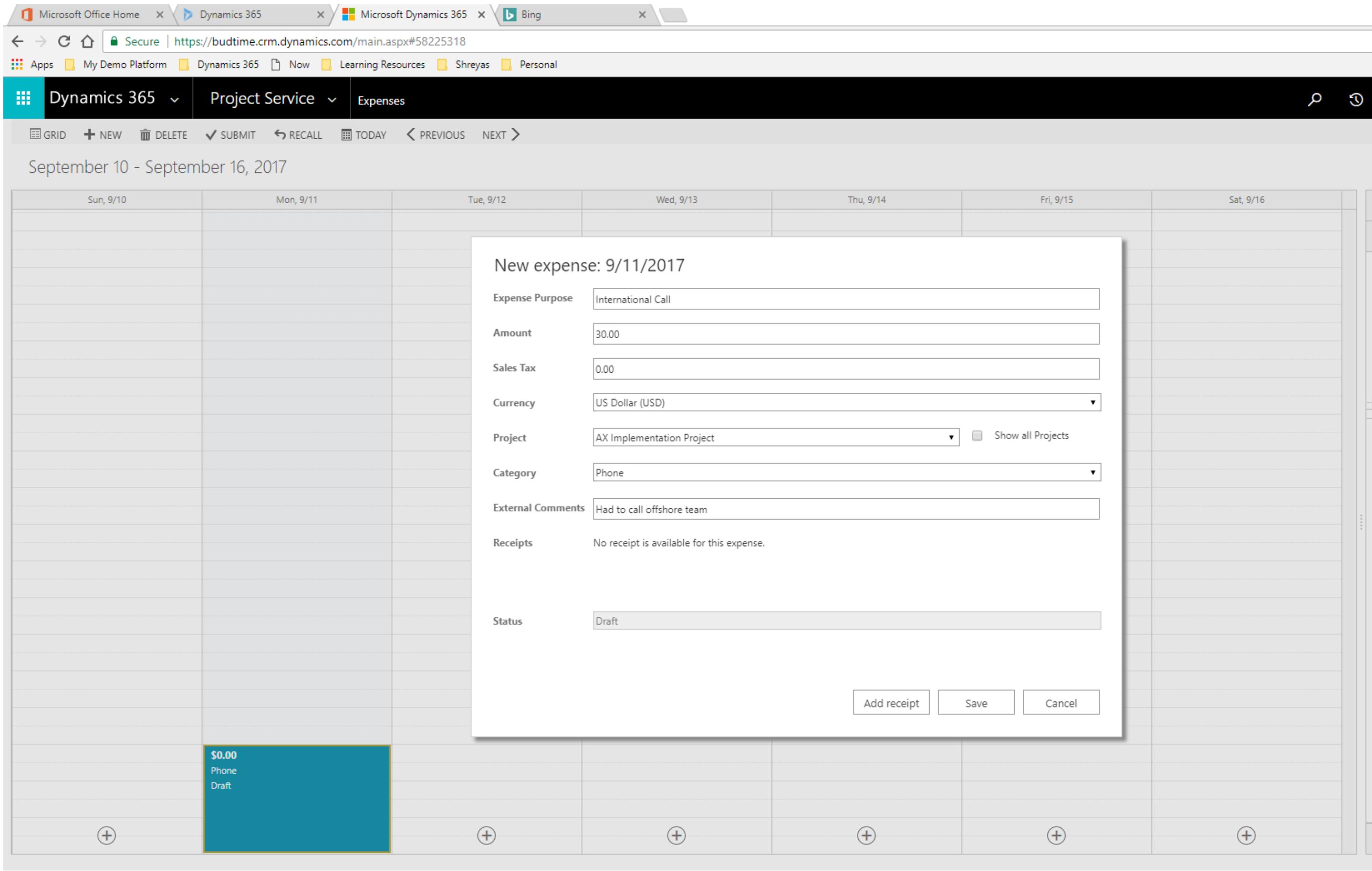
Microsoft Office Home
Dynamics 365
Project Approval Time En
Bing
Secure https://budtime.crm.dynamics.com/main.aspx#349166833
Apps My Demo Platform Dynamics 365 Now Learning Resources Shreyas Personal
Dynamics 365
Project Service
Project Approvals
Your Dynamics 365 trial will expire in 18 day(s)
Buy Now
SKILL APPROVAL
EXPORT TO EXCEL
CHART PANE
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



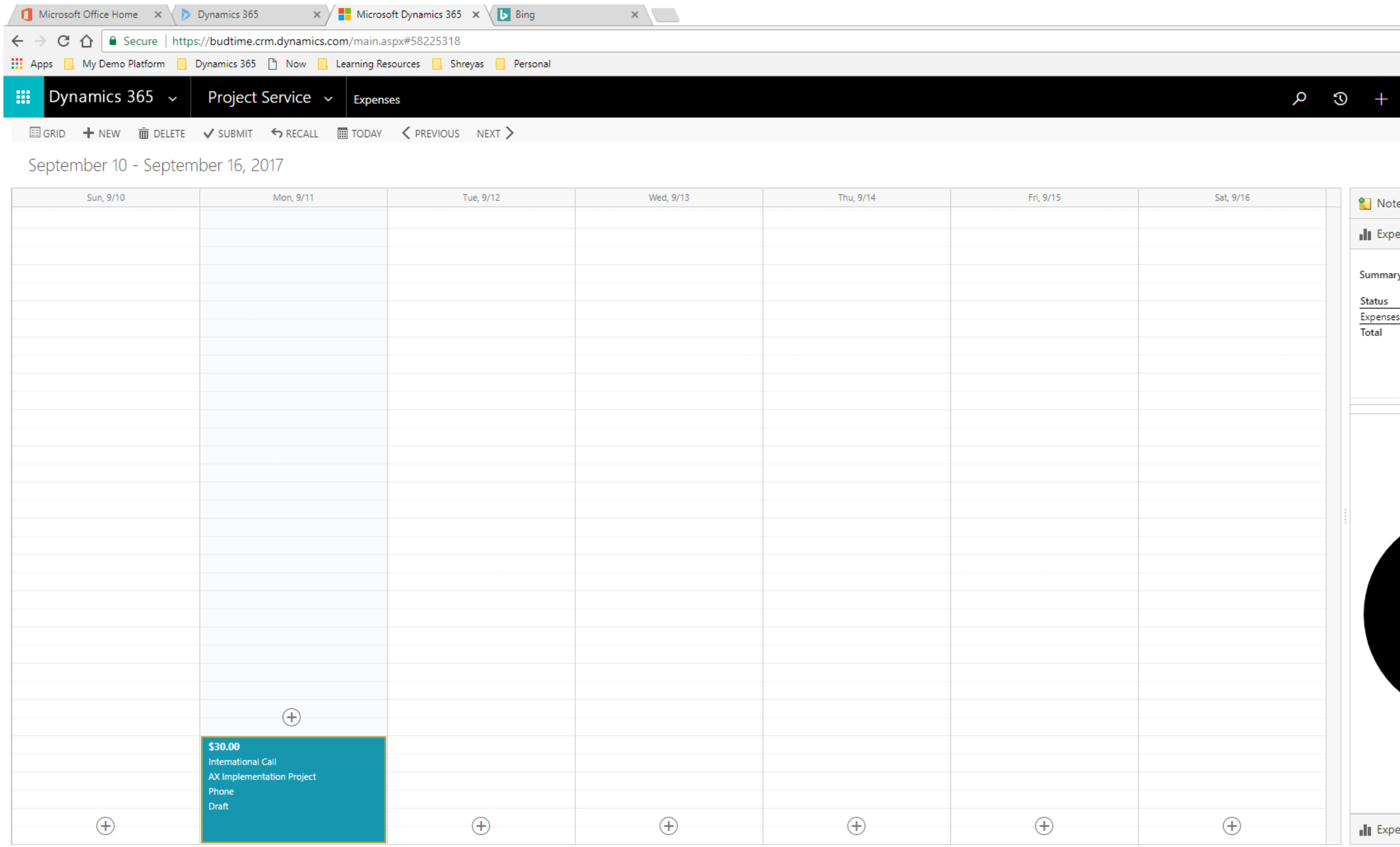
Expense Entry

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

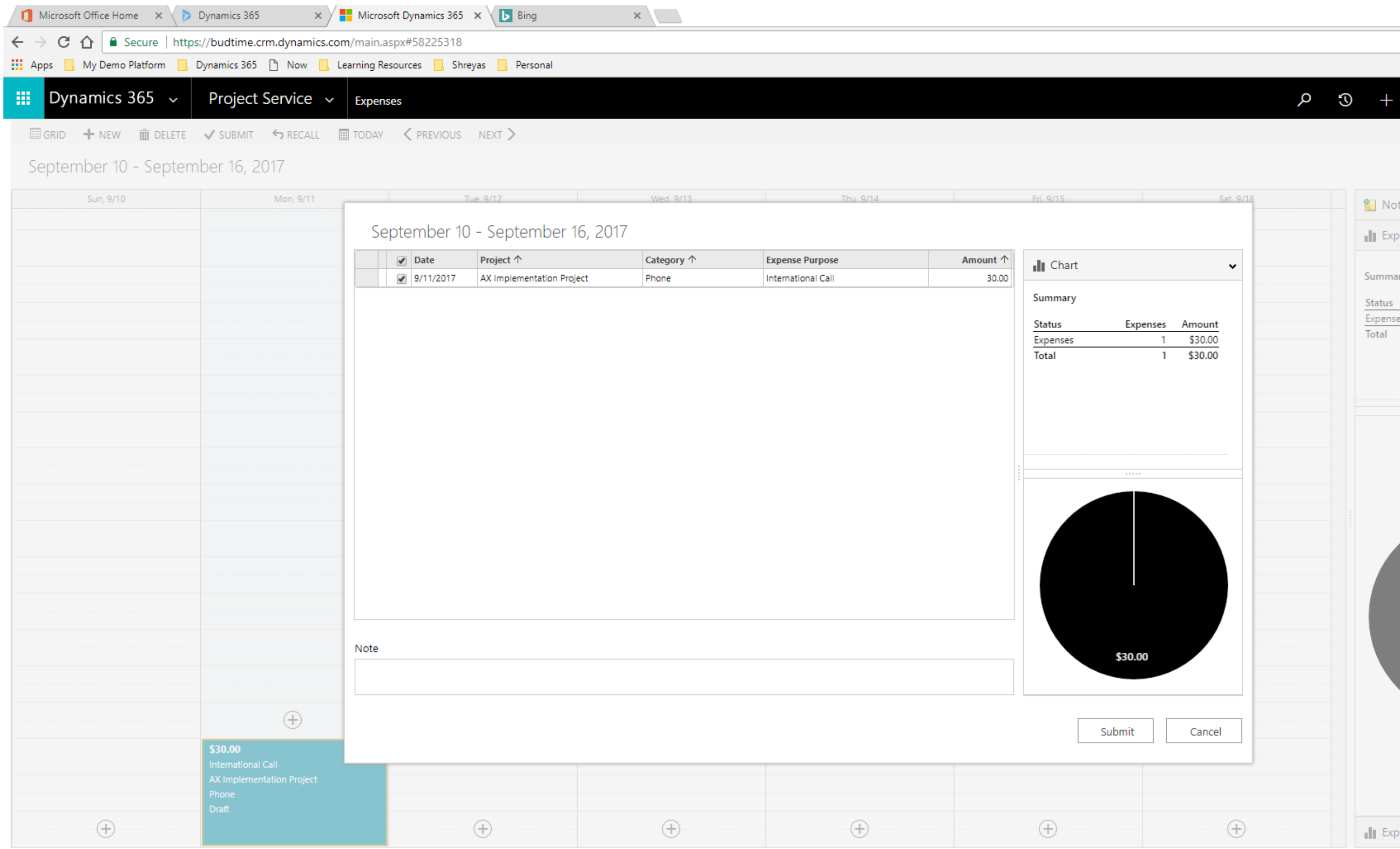
On the screen fill in all the details. You can also add the receipt here by clicking “Add Receipt”.



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

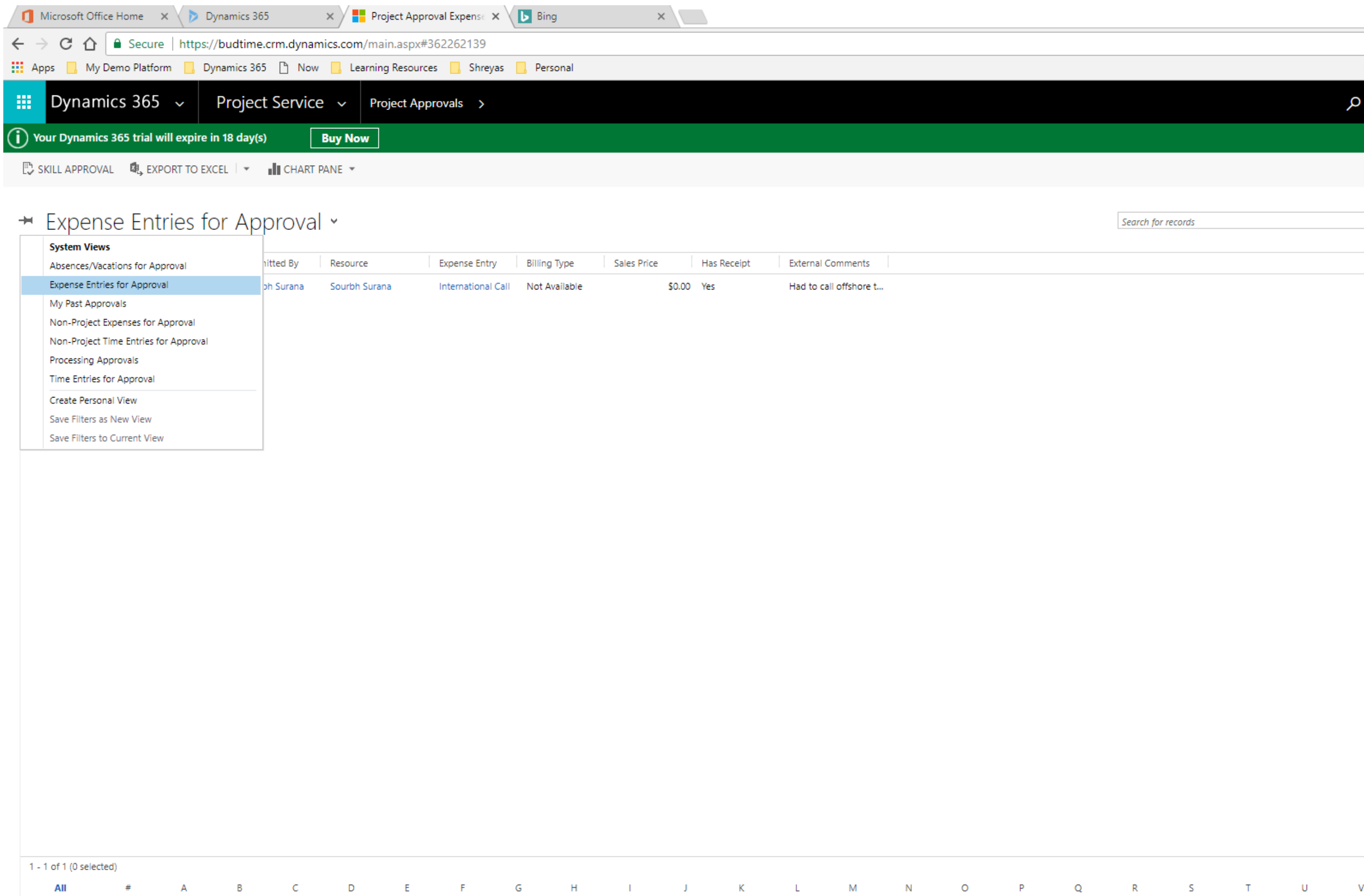


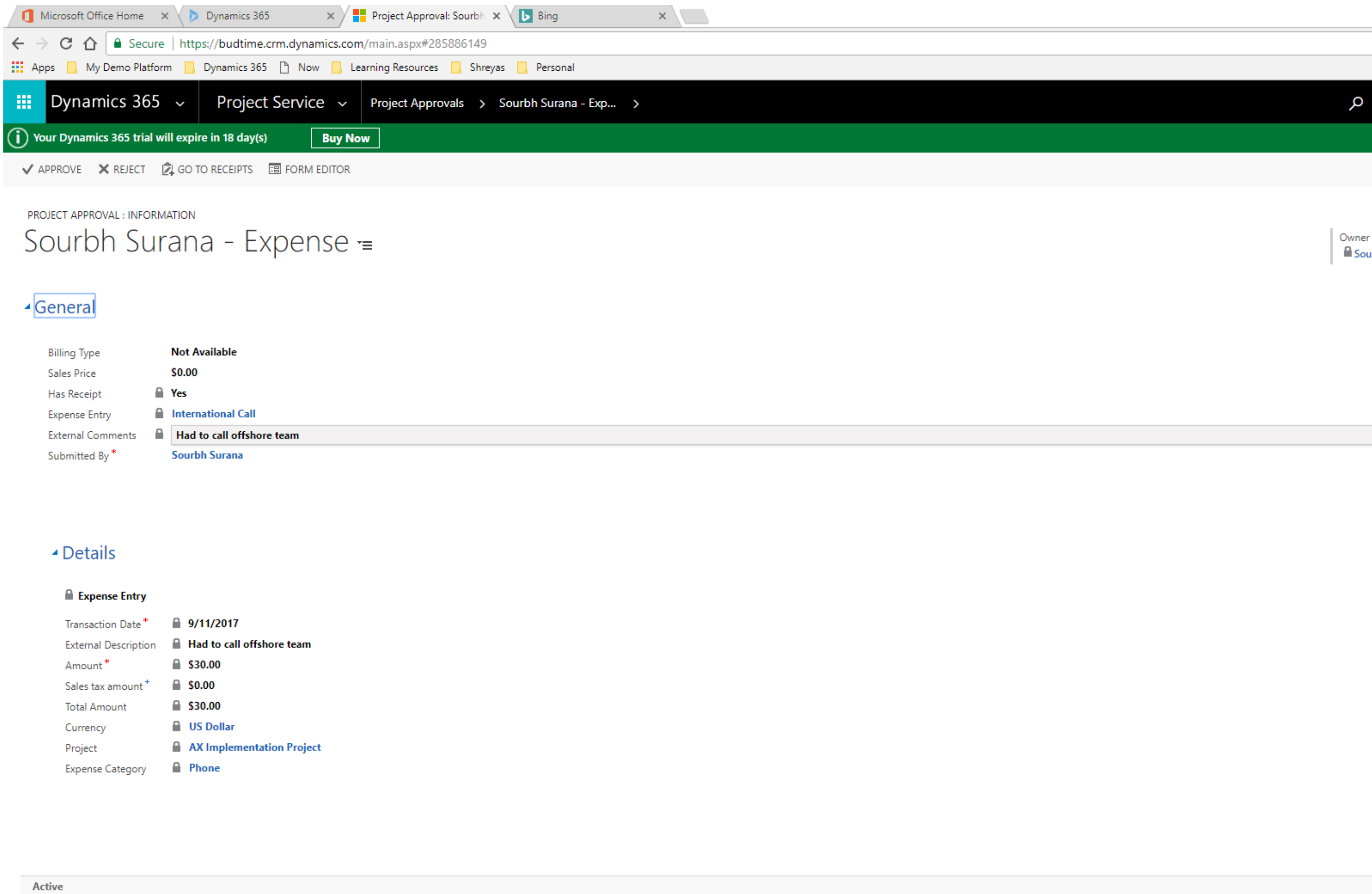
Now click on submit



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.

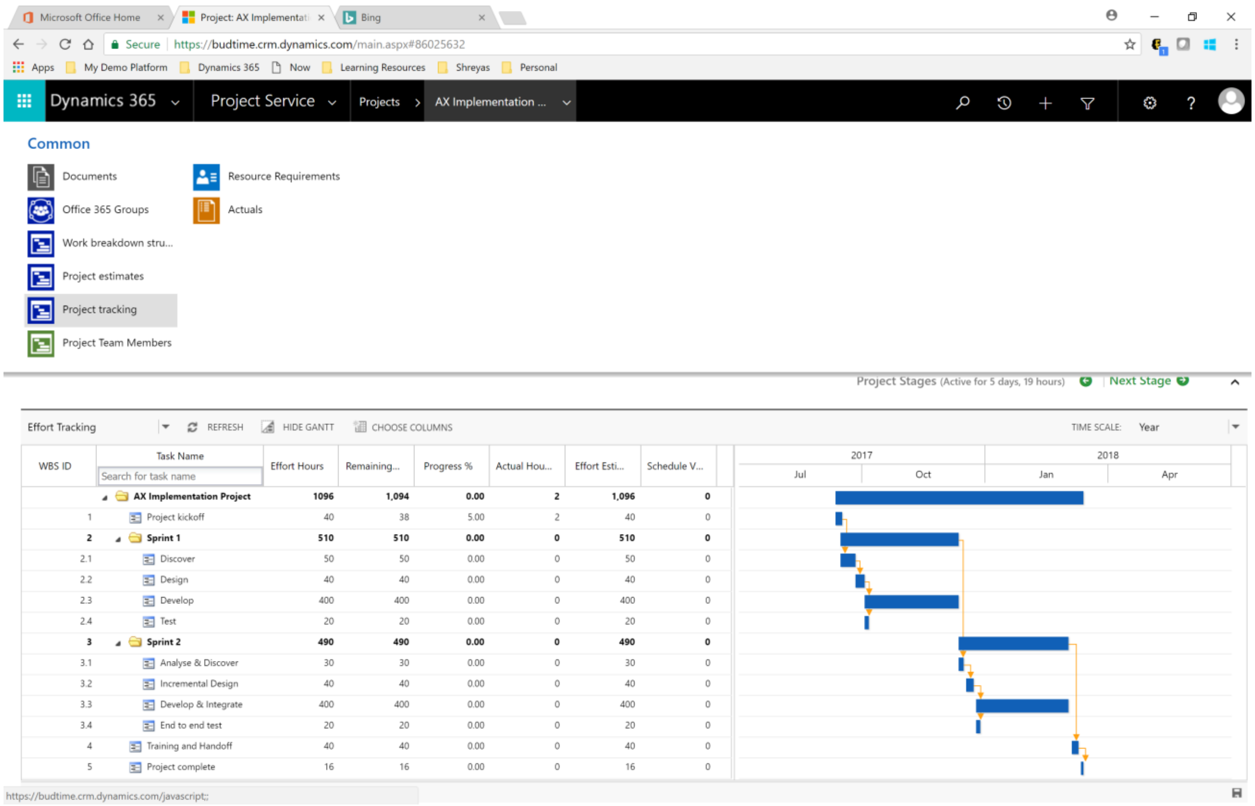

Microsoft Office Home
Dynamics 365
Project Approval Expense
Bing
Secure | https://budtime.crm.dynamics.com/main.aspx#362262139
Apps
My Demo Platform
Dynamics 365
Now
Learning Resources
Shreyas
Personal
Dynamics 365
Project Service
Project Approvals
Your Dynamics 365 trial will expire in 18 day(s)
Buy Now
SKILL APPROVAL
EXPORT TO EXCEL
CHART PANE
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
itted By
Resource
Expense Entry
Billing Type
Sales Price
Has Receipt
External Comments
h 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



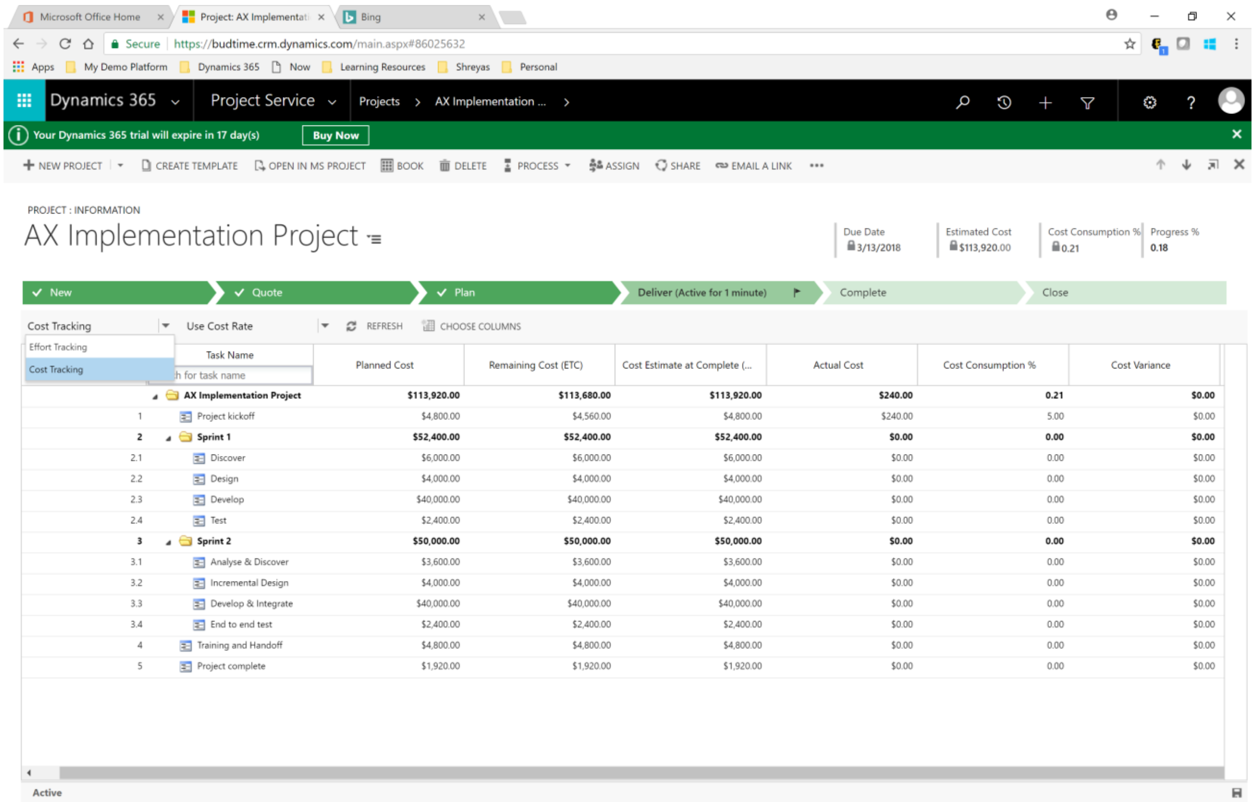
Project manager can now click on the Approve to approve the expense.

Project Tracking

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

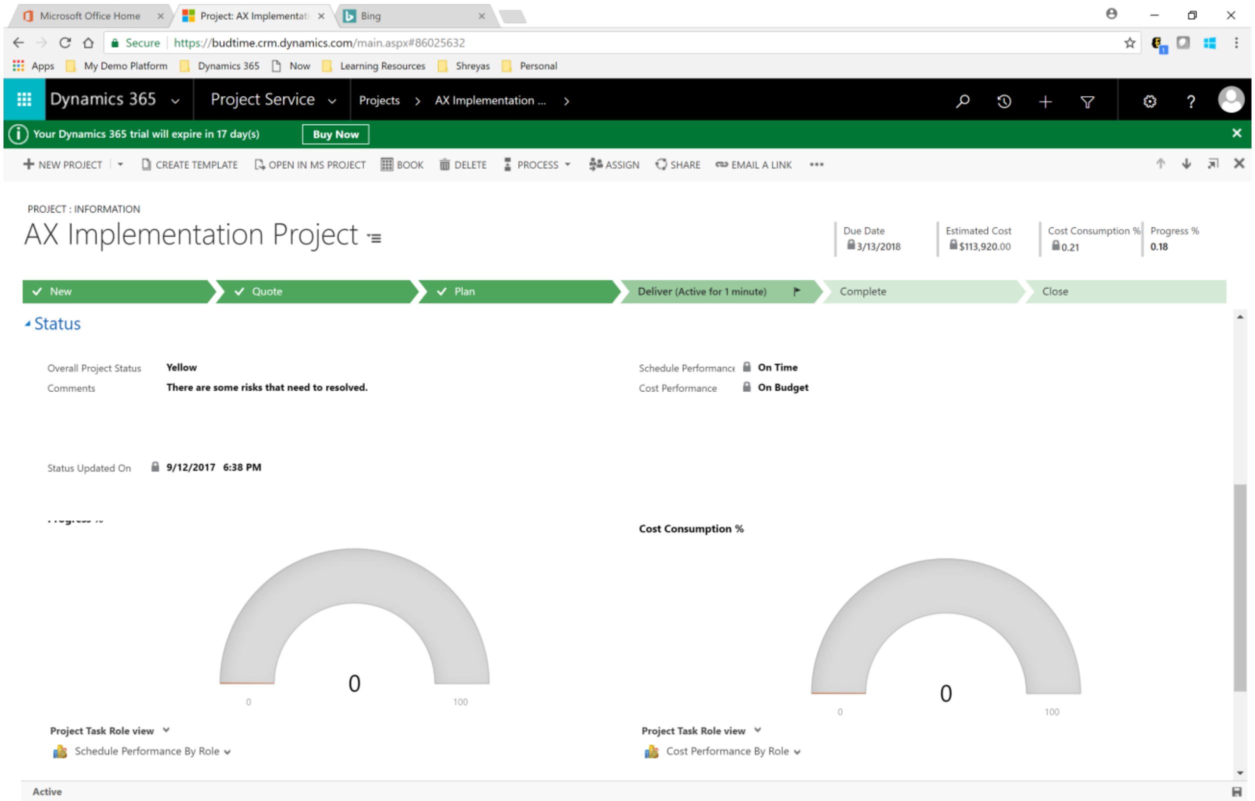


Here you can toggle between effort tracking and the cost tracking to see the progress of the project by effort and cost.



	Task Name	Planned Cost	Remaining Cost (ETC)	Cost Estimate at Complete (...	Actual Cost	Cost Consumption %	Cost Variance
	AX Implementation Project	$113,920.00	$113,680.00	$113,920.00	$240.00	0.21	$0.00
1	Project kickoff	$4,800.00	$4,560.00	$4,800.00	$240.00	5.00	$0.00
2	Sprint 1	$52,400.00	$52,400.00	$52,400.00	$0.00	0.00	$0.00
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
3	Sprint 2	$50,000.00	$50,000.00	$50,000.00	$0.00	0.00	$0.00
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

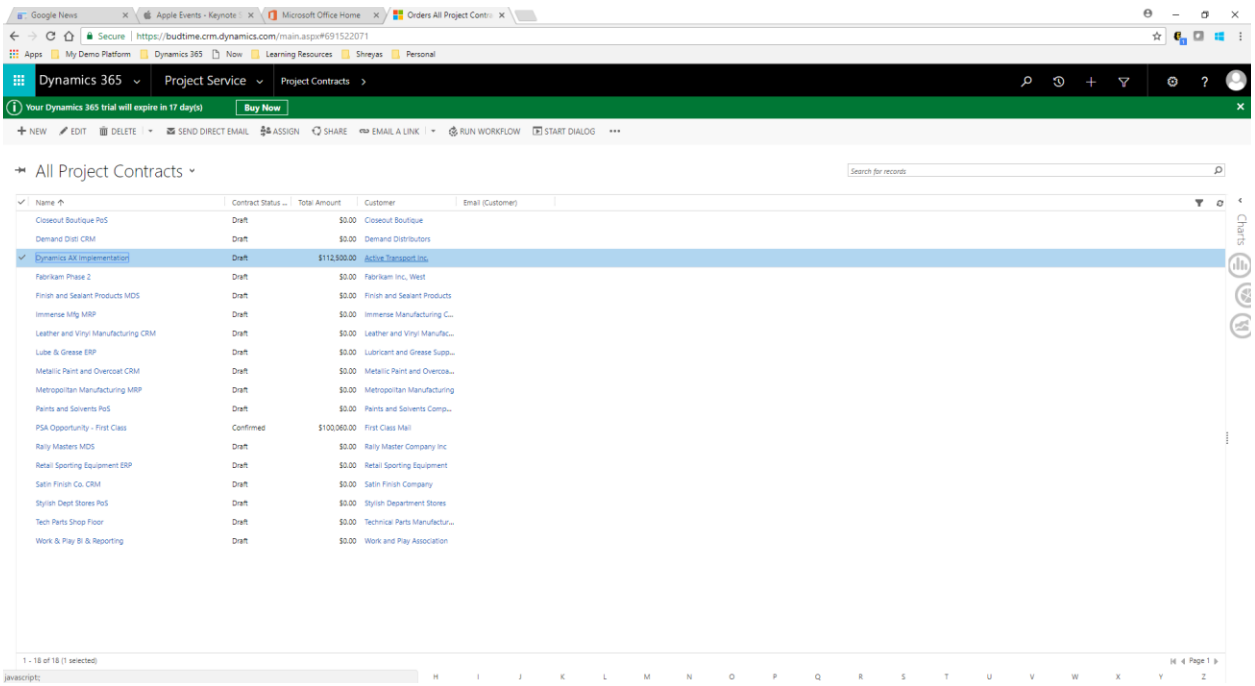
The overall project status can be got from the Project record → Status Tab.



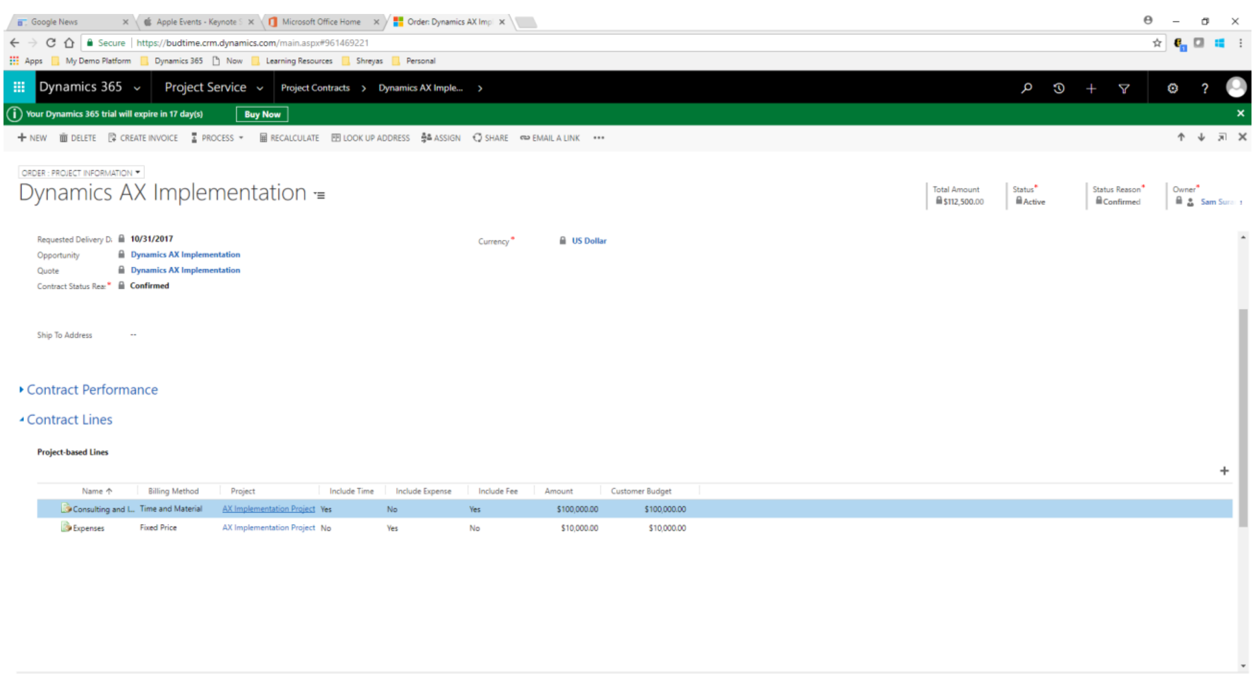
Microsoft Office Home
Project: AX Implementati
Bing
Secure https://budtime.crm.dynamics.com/main.aspx#86025632
Apps My Demo Platform Dynamics 365 Now Learning Resources Shreyas Personal
Dynamics 365
Project Service
Projects
AX Implementation ...
Your Dynamics 365 trial will expire in 17 day(s)
Buy Now
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
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
Cost Consumption %
0
0
100
0
0
100
Project Task Role view
Schedule Performance By Role
Project Task Role view
Cost Performance By Role
Active

Project Billing

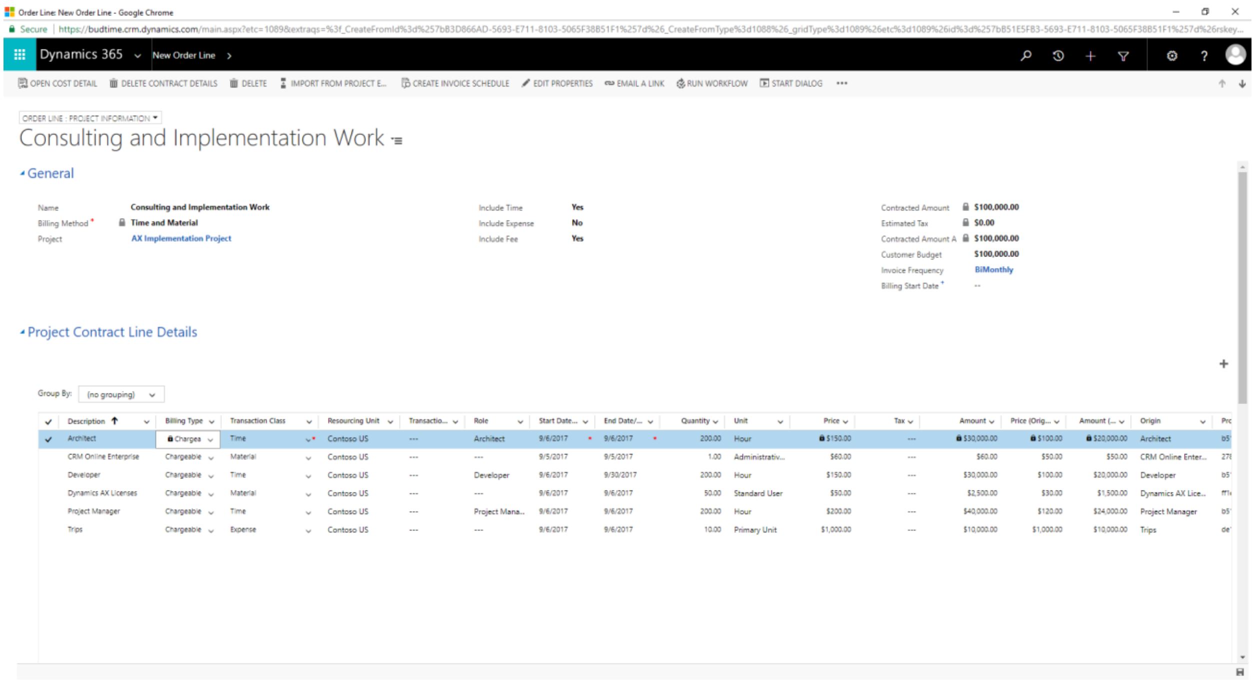
Navigate to Project Service → Project Contracts and open the Dynamics AX implementation contract.



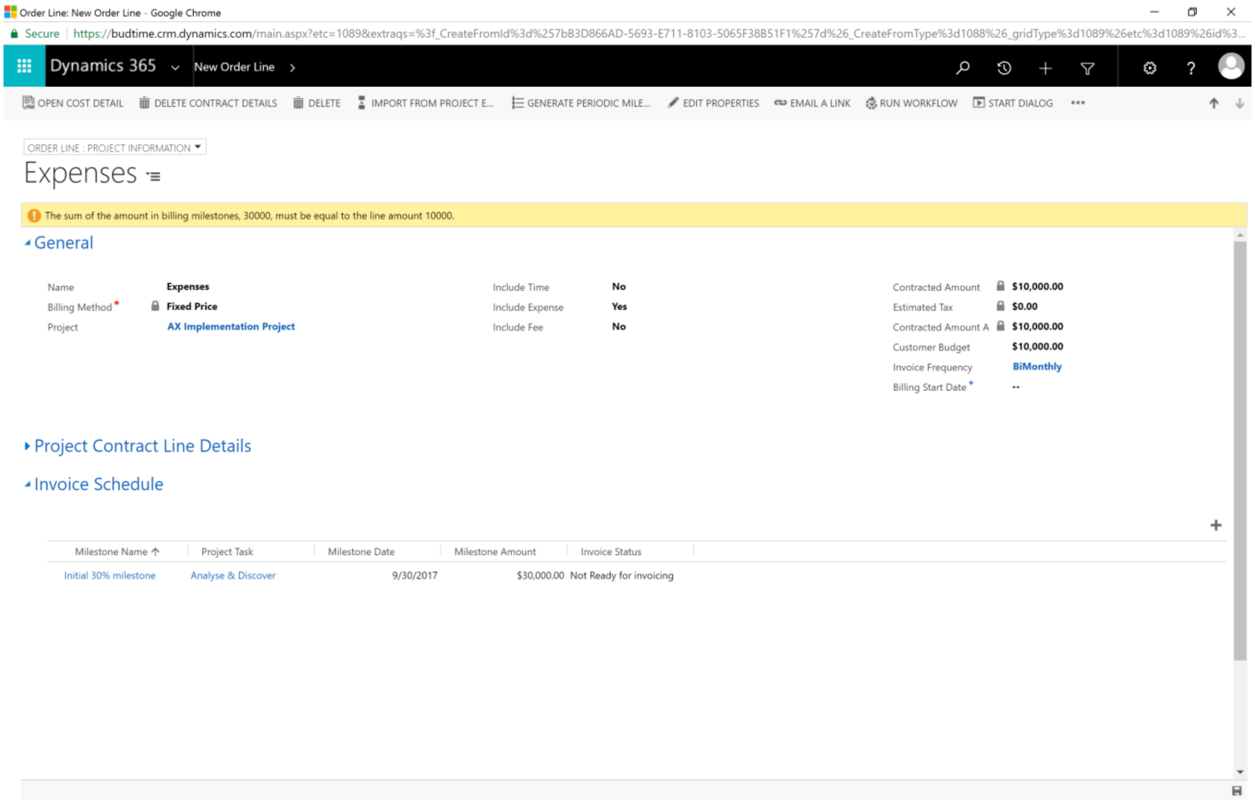
Here you can review the contract lines on which project based lines are used for kind of transactions and also have billing methods for the contract line. You can also review the contract performance here.



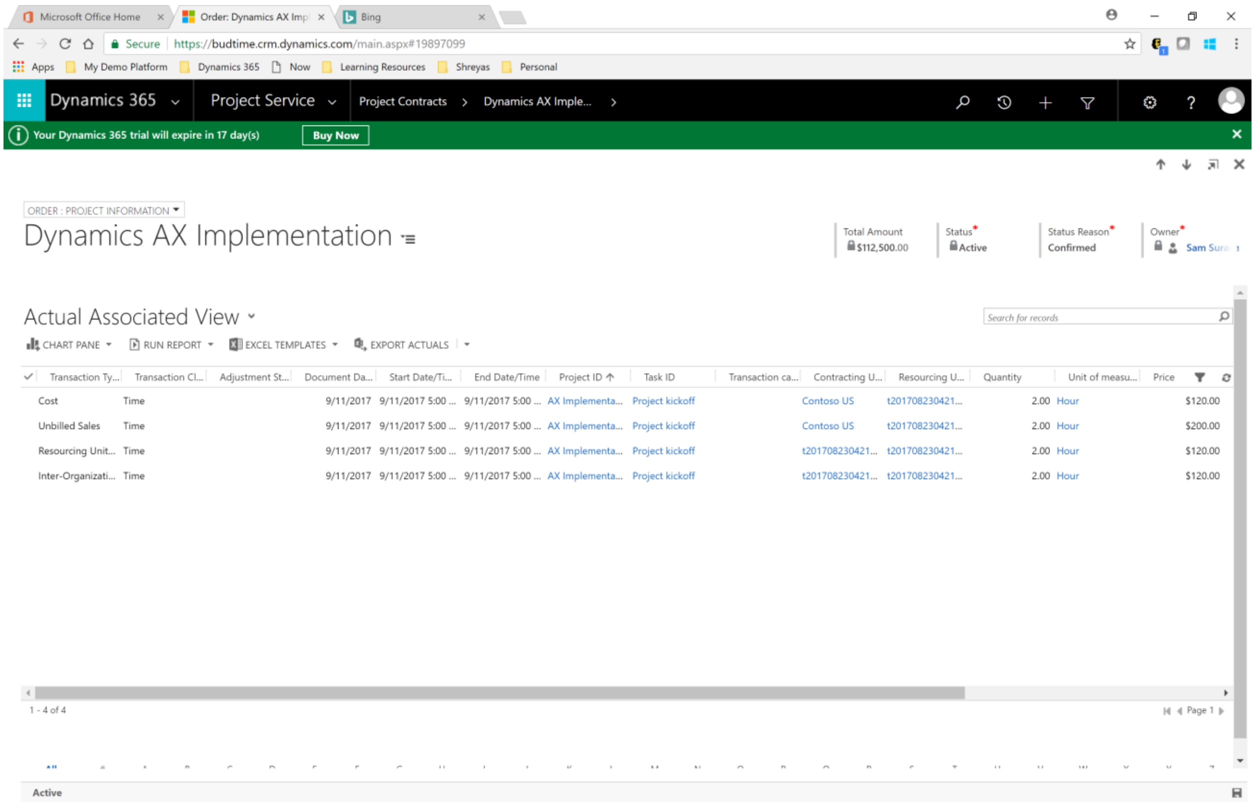
Lets open the first contract line “Consulting and Implementation”. Here you can see the details of the project contract lines.



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.

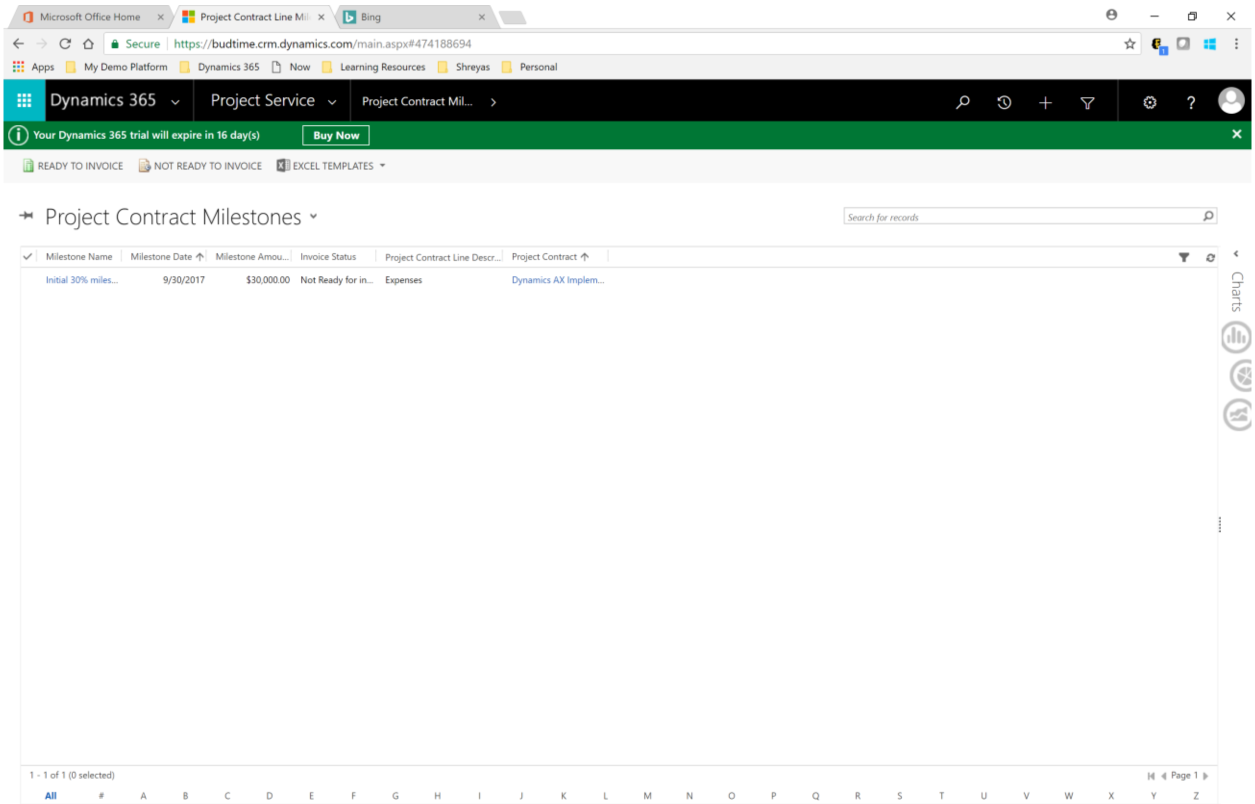


To see the Actuals, click on navigation bar and click “Actuals”. Here you should be able to see everything that was approved for the project.

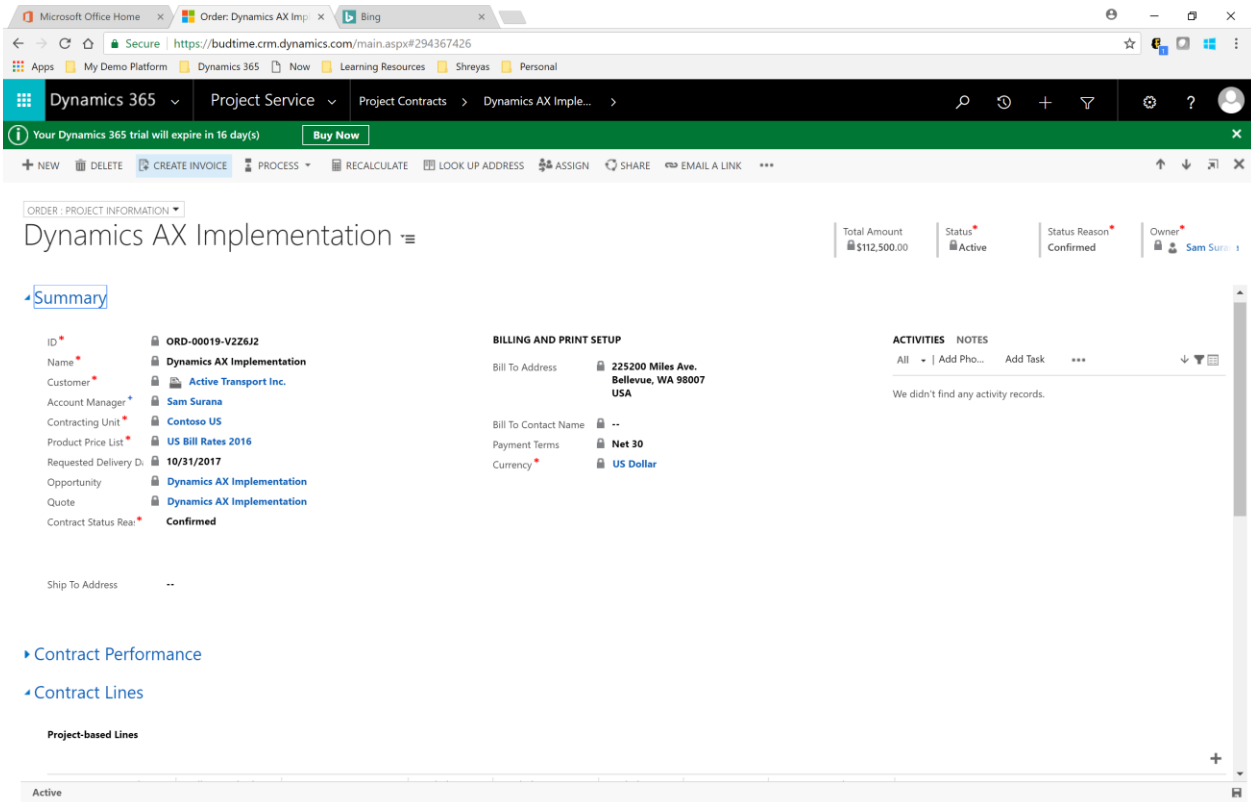


Now for the billing.

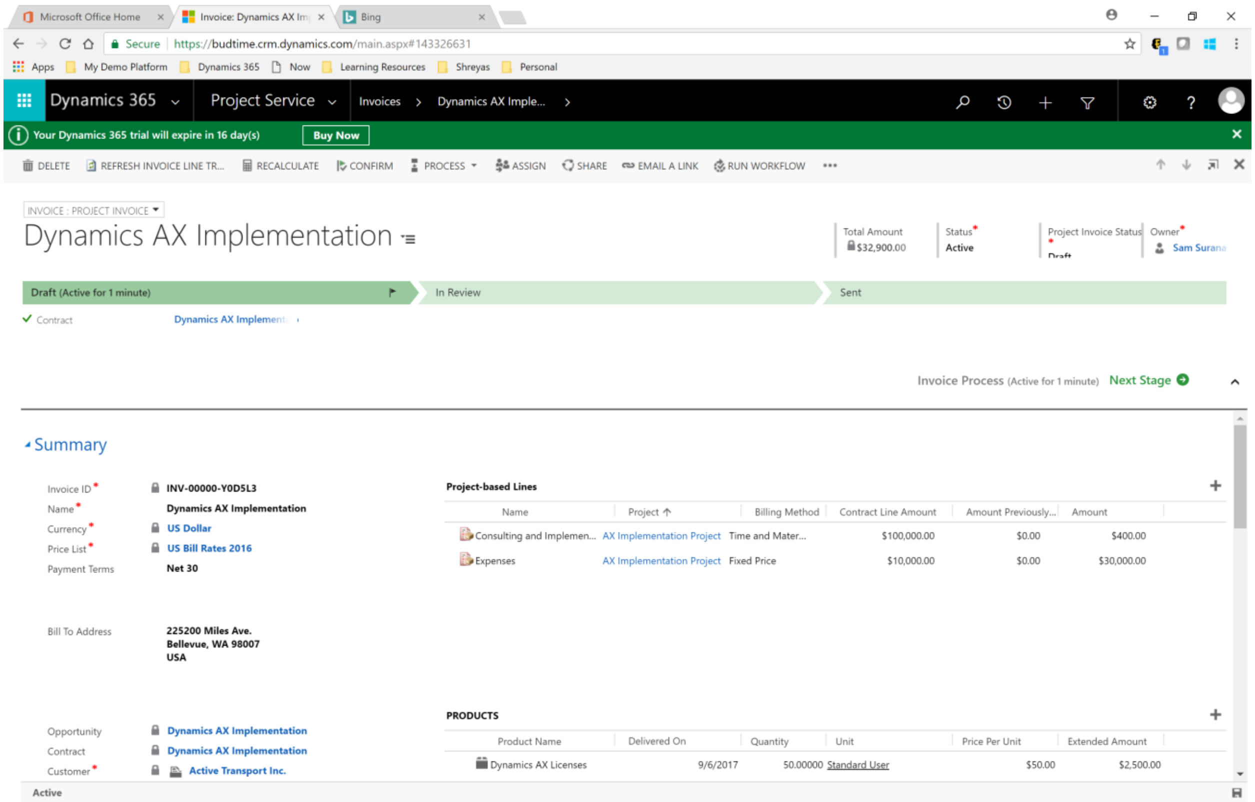
In order to bill a milestone we need to manually make the milestone ready for billing prior to generating an invoice. We can view all the project milestones by going to Project Service → Project contract milestones. Open the contract milestones and change the status to ready of invoicing.



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



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.


Microsoft Office Home
Invoice: Dynamics AX Im
Bing
Secure https://budtime.crm.dynamics.com/main.aspx#143326631
Apps My Demo Platform Dynamics 365 Now Learning Resources Shreyas Personal
Dynamics 365
Project Service
Invoices
Dynamics AX Imple...
Your Dynamics 365 trial will expire in 16 day(s)
Buy Now
DELETE REFRESH INVOICE LINE TR... RECALCULATE CONFIRM PROCESS ASSIGN SHARE EMAIL A LINK RUN WORKFLOW
INVOICE : PROJECT INVOICE
Dynamics AX Implementation
Total Amount $32,900.00
Status Active
Project Invoice Status Draft
Owner Sam Surana
Draft (Active for 1 minute)
In Review
Sent
Contract Dynamics AX Implement
Invoice Process (Active for 1 minute) Next Stage
Summary
Invoice ID INV-00000-Y0D5L3
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

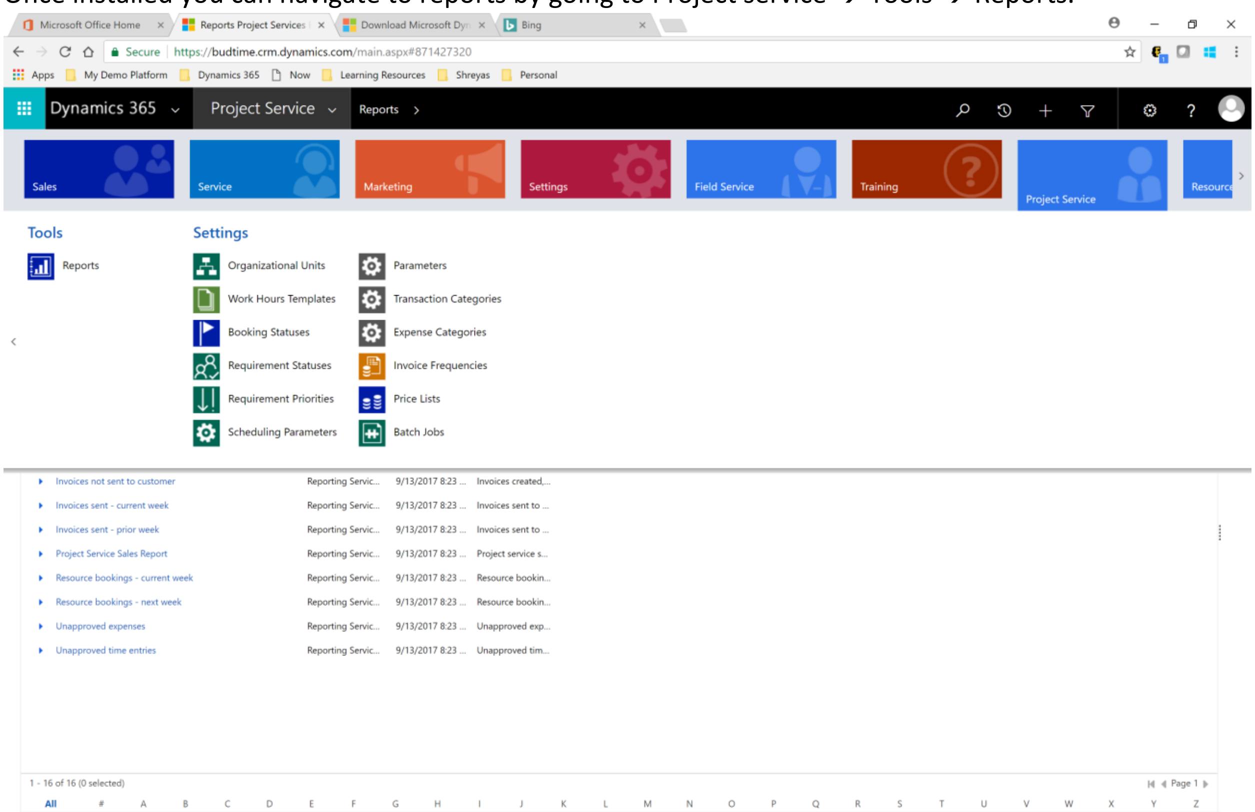
SQL Server Reporting Services Reports

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.

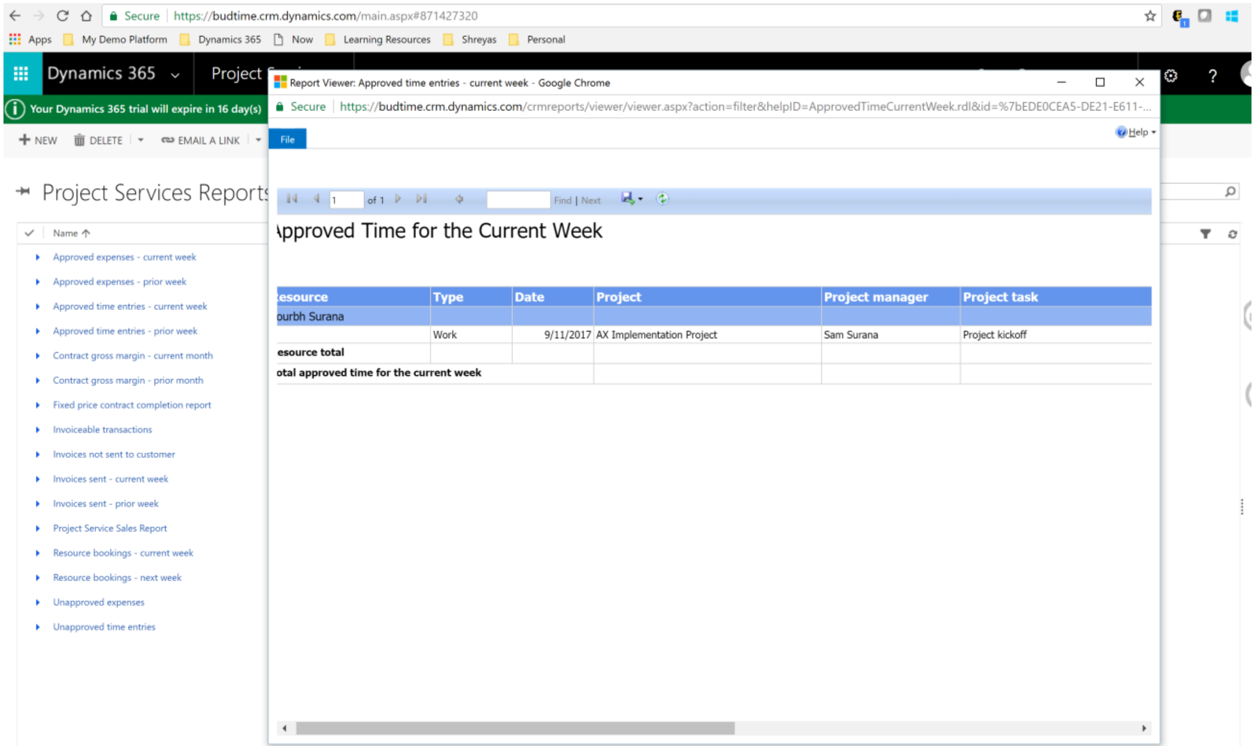
Here is the link to the sample reports

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.



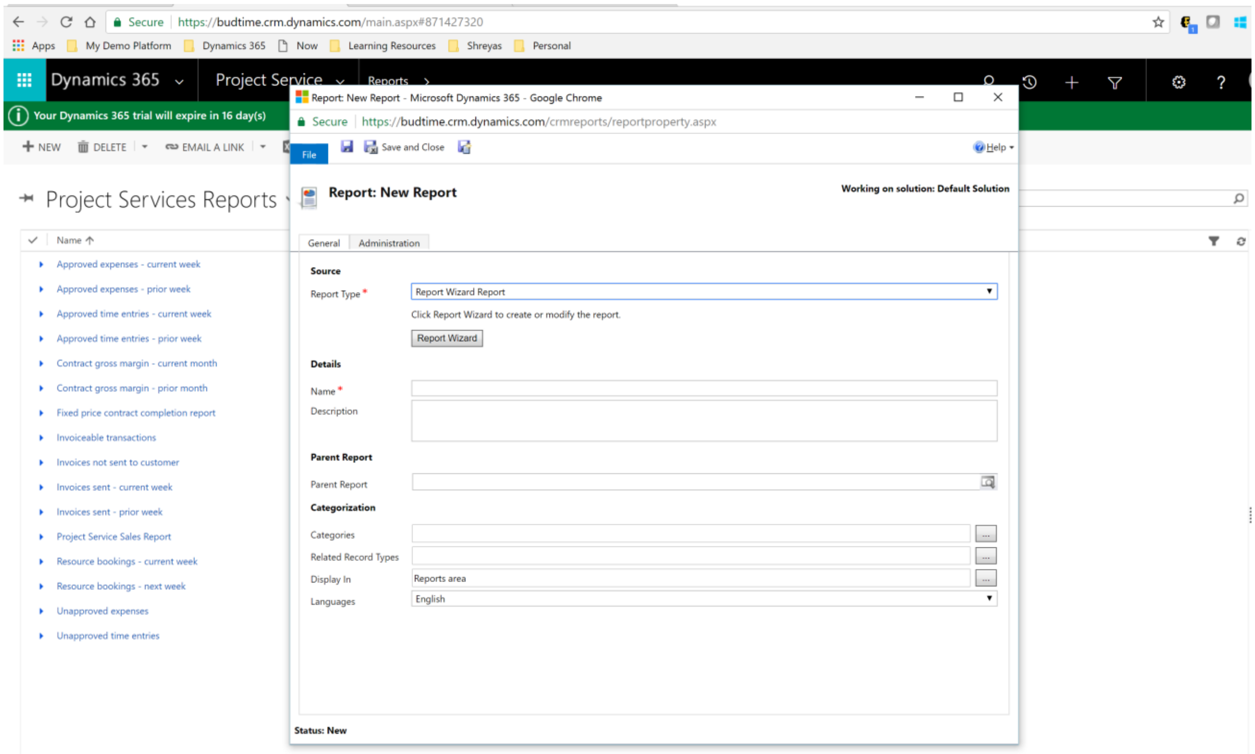
There are 16 reports here. Lets run Approved time entries for this week. You see that we have the time entry that we approved earlier.



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 customers business then a custom SSRS report can be developed. We will not go into details of this but here are 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

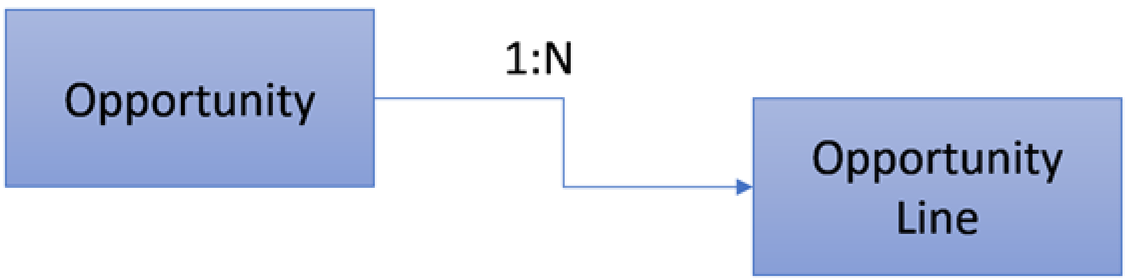
Following information is collated from the neil parkhurst's blog at https://neilparkhurst.com/2017/02/16/psa-data-model/

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

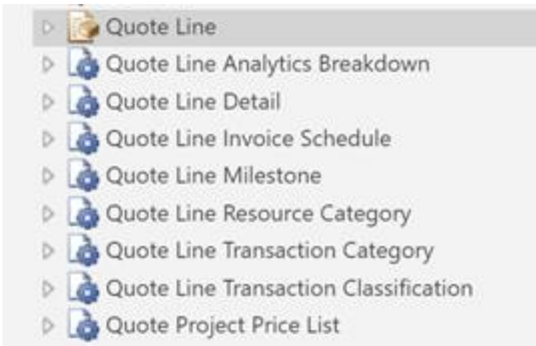
				order type of "Work Based" will be Project based opportunities.

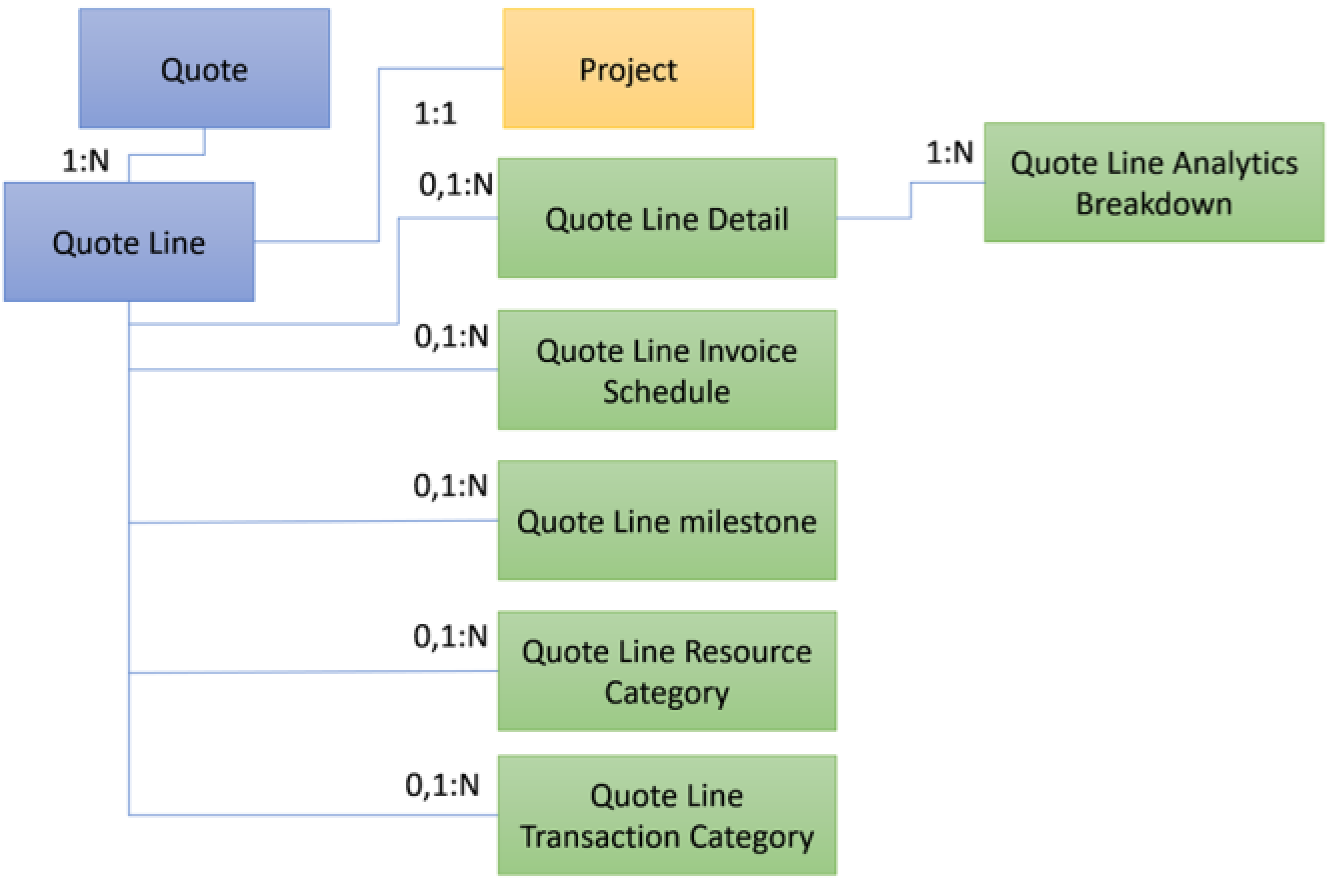
Entity	Schema Name	Display Name	Type	Comments
Opportunity Line	msdyn_BillingMethod	Billing Method	Option Set (Global)	Billing method for the project opportunity line. Options include Time and Material and Fixed Price
Opportunity Line	msdyn_BudgetAmount	Budget Amount	Currency	The customers budget for the opportunity line.
Opportunity Line	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"

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.)

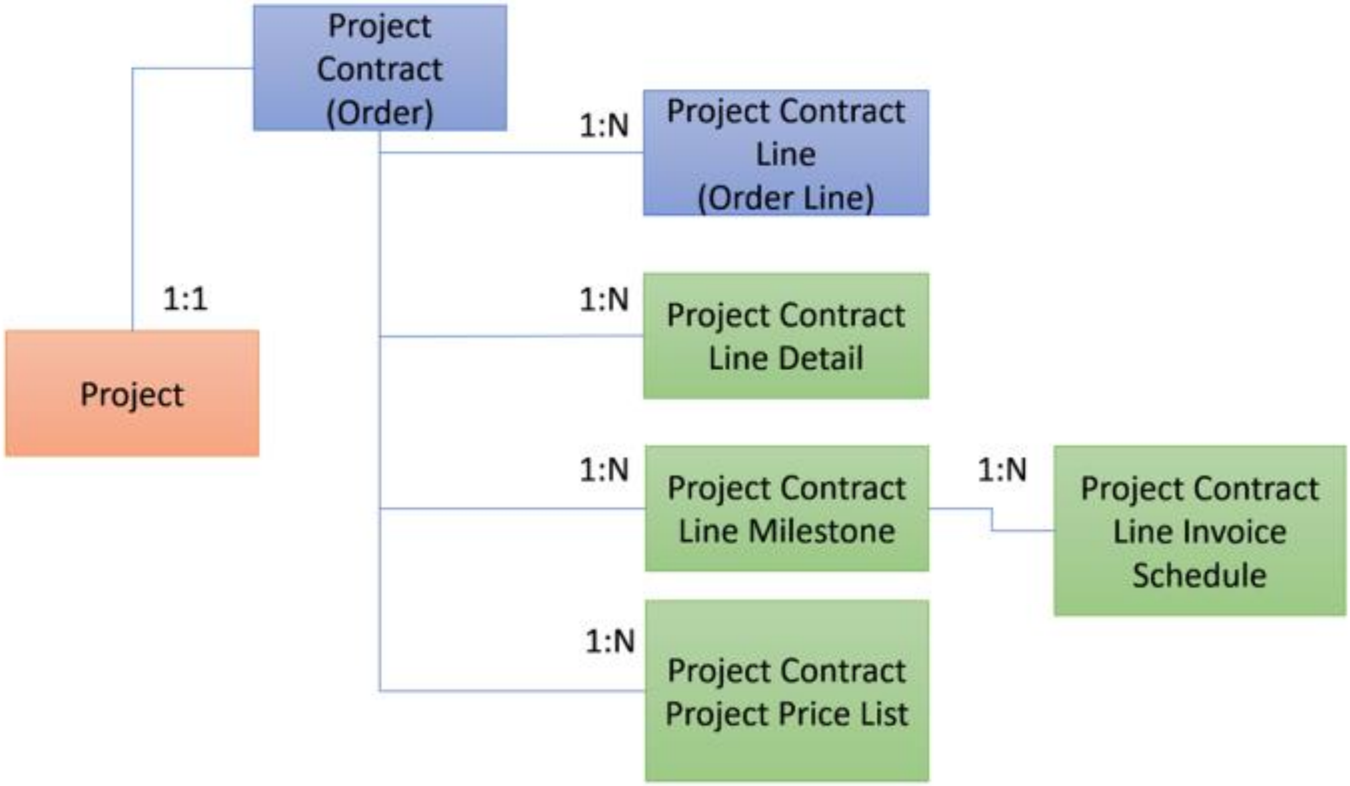
Quote line invoice schedule – holds the intended invoice schedule for customer billing and will get carried forward to the project contract when the quote is won. This is generated off the billing frequency from the quote line.

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.

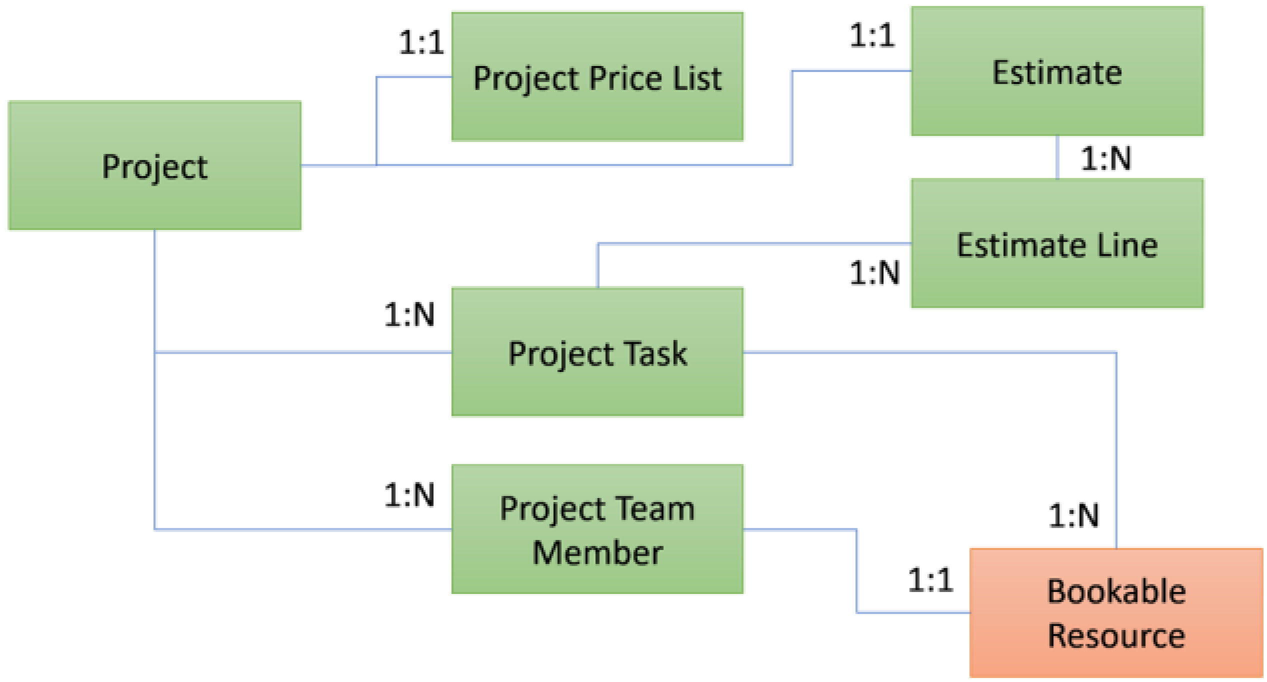
Project Contract

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

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.



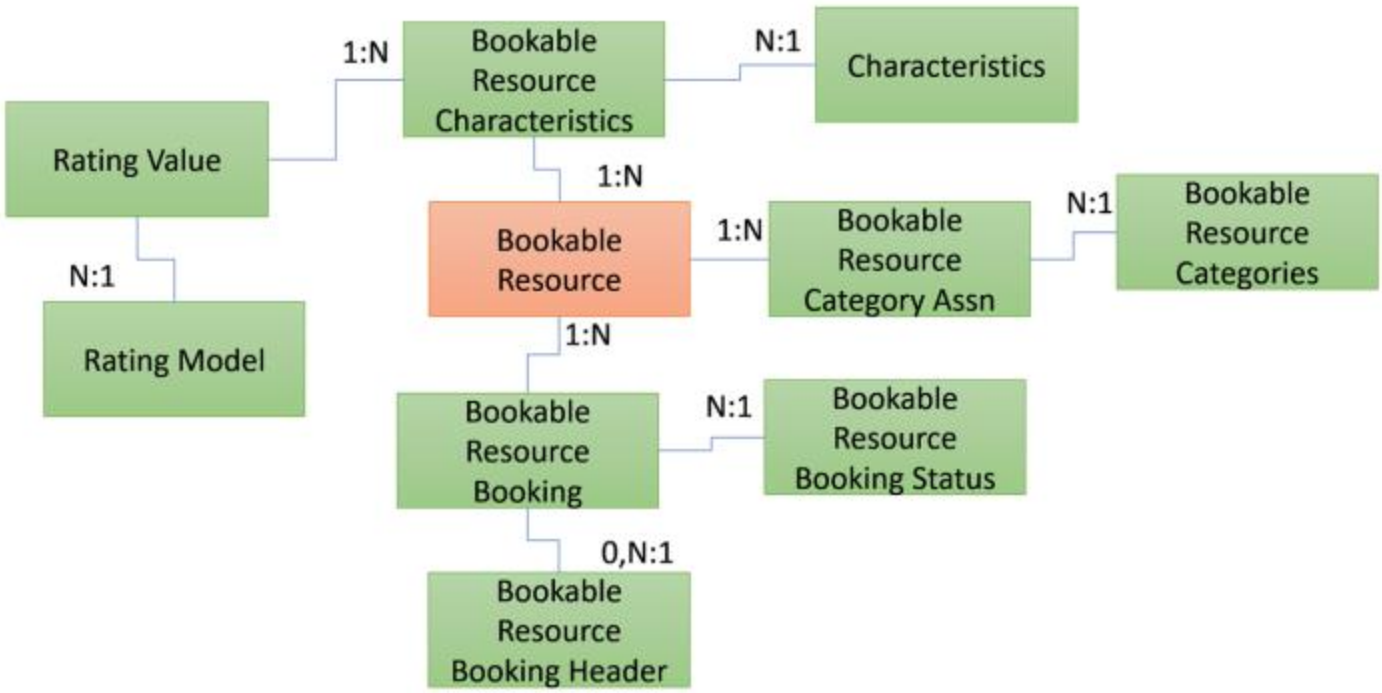
Bookable Resource

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 the in 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

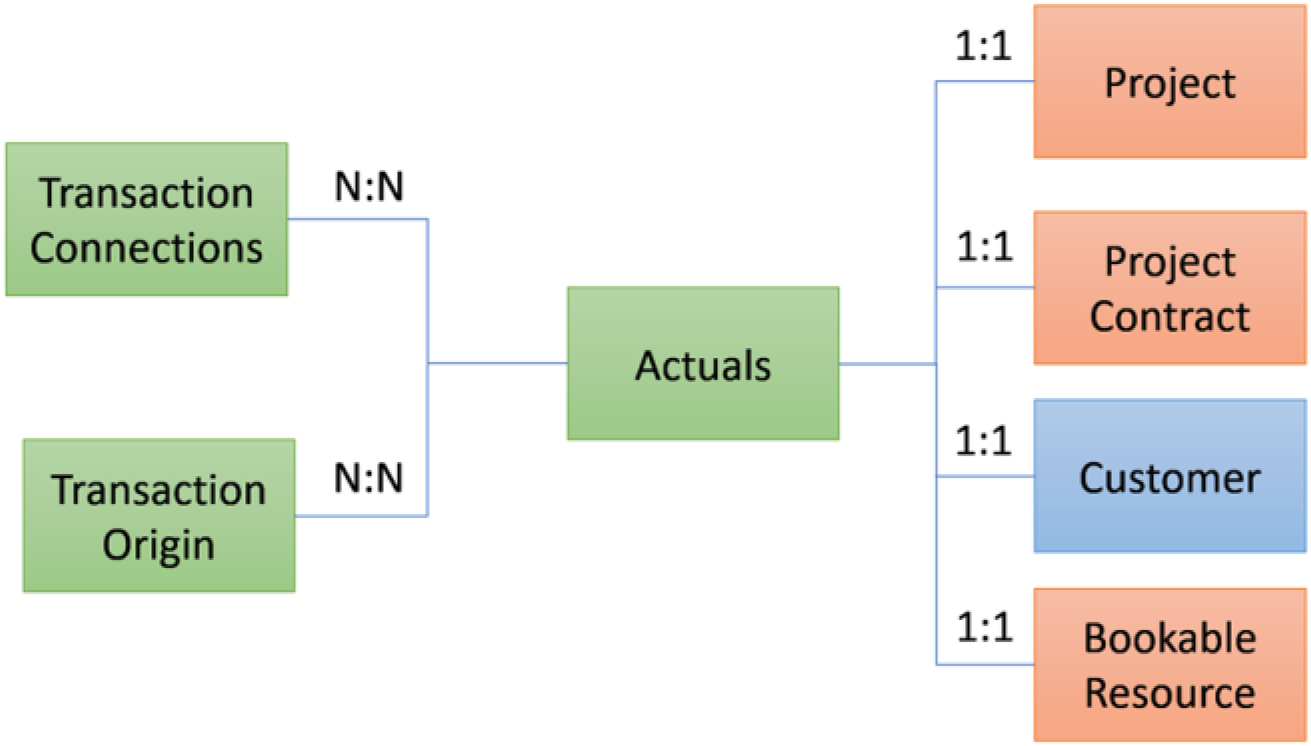
The actuals entity will store details of actual business transactions on your project. Including information on sales values, costs and quantities. When you create financial reports or maybe source data for integration with other systems, the actual entity and its associated entities will be a common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

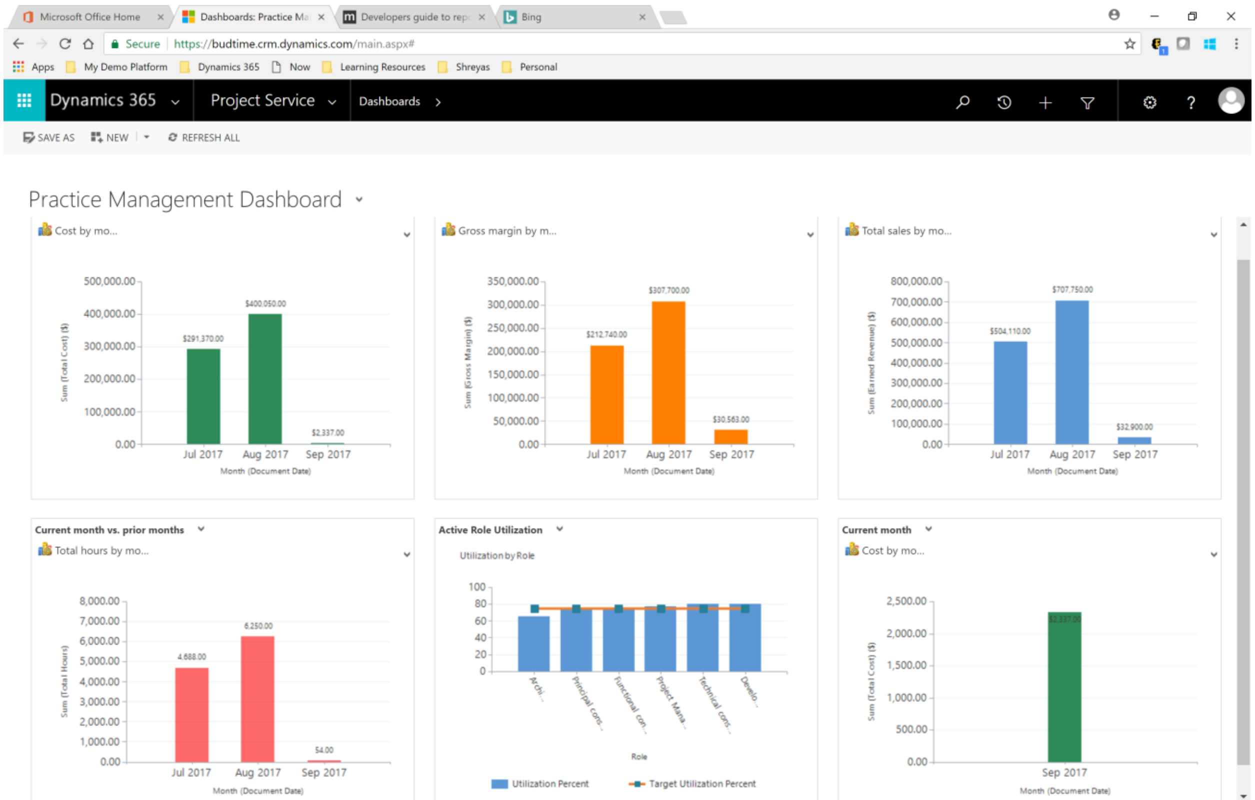
Actuals get created when there is a financial impact on your project. Meaning draft or submitted expenses would not show. Actuals would be created once the expense (or time) entries are approved.



Dashboard

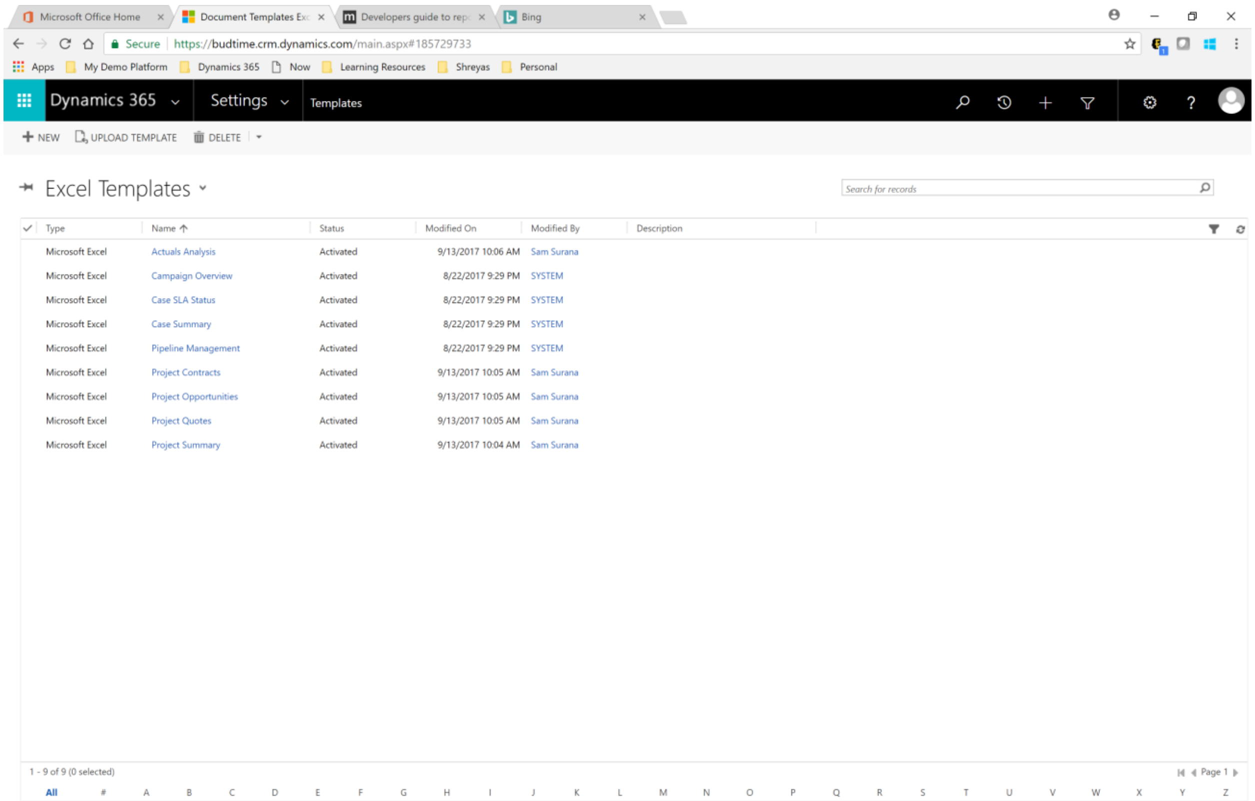
Practice Management Dashboard

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".

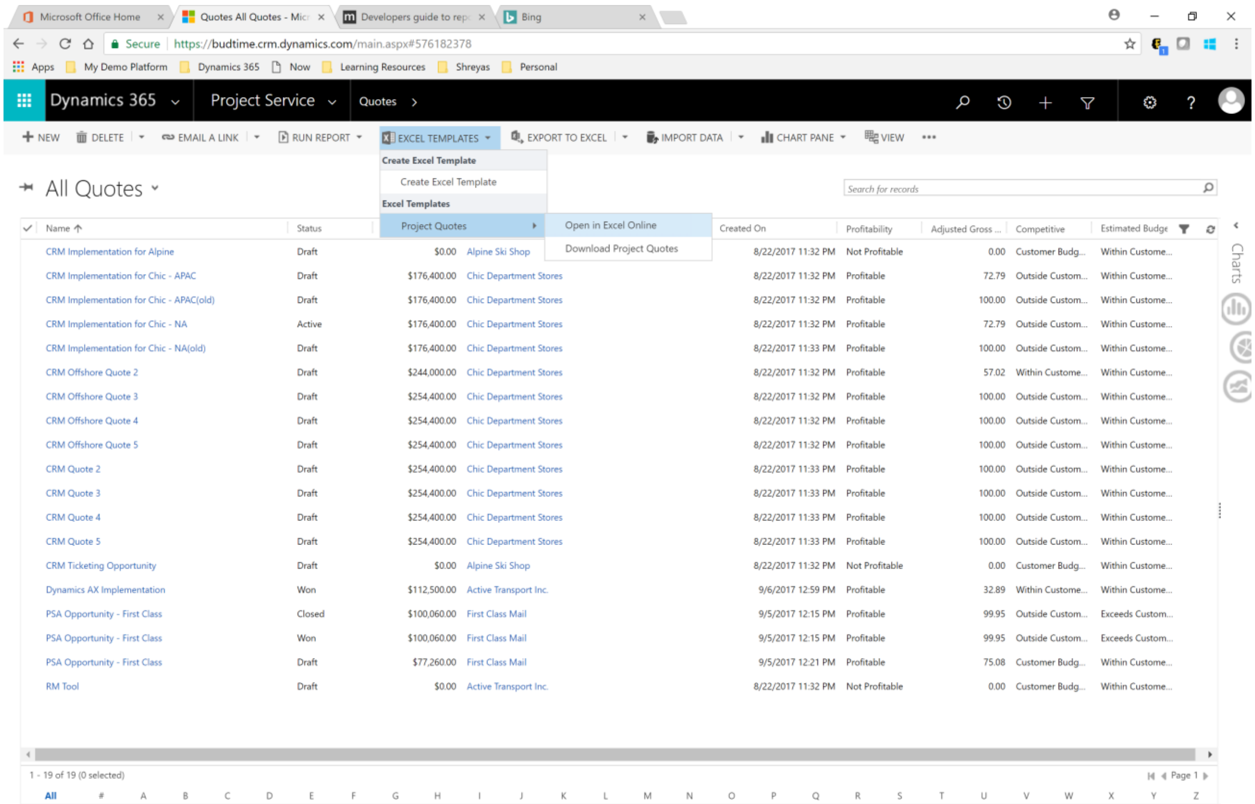


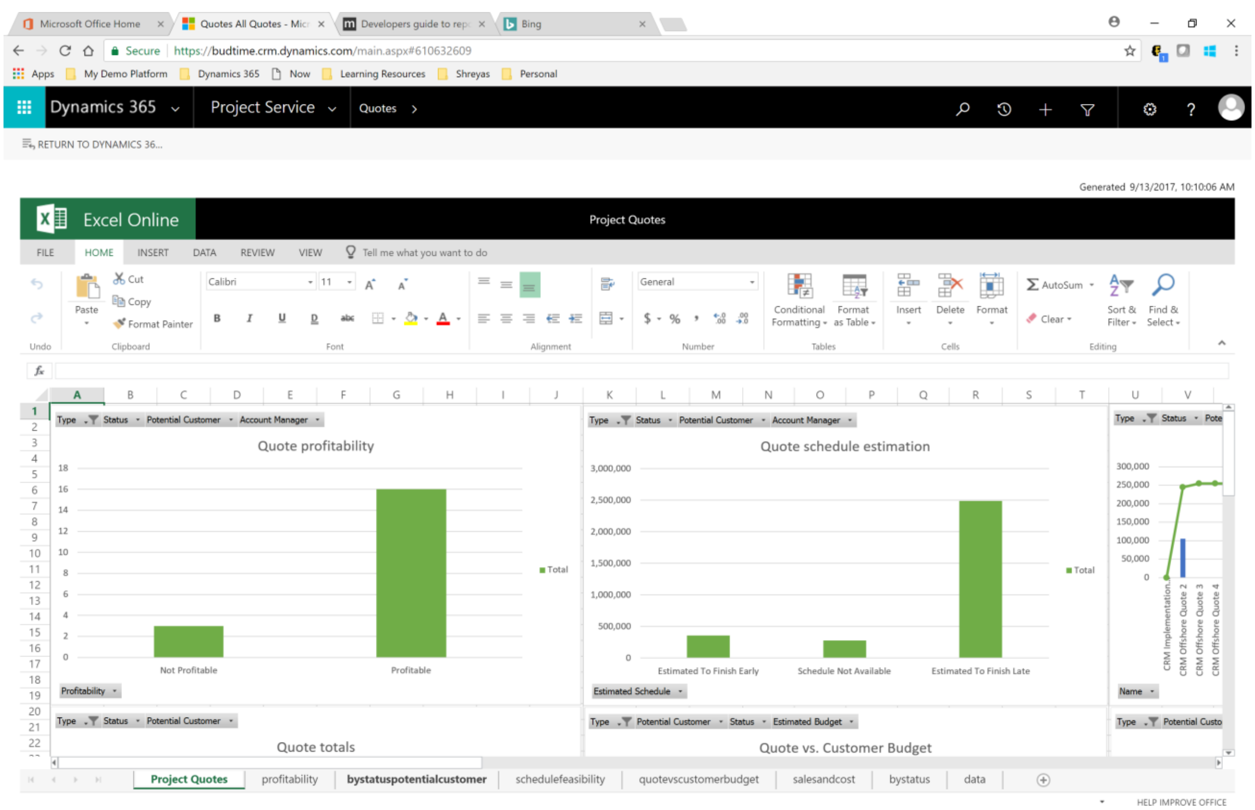
Excel Templates

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.



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 - Micr
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
Create Excel Template
Create Excel Template
Excel Templates
Project Quotes
Open in Excel Online
Download Project Quotes
All Quotes
Search for records
Name Status Created On Profitability Adjusted Gross ... Competitive Estimated Budge
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)
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
Charts


Microsoft Office Home
Quotes All Quotes - Micr
Developers guide to rep
Bing
Secure | https://budtime.crm.dynamics.com/main.aspx#610632609
Apps My Demo Platform Dynamics 365 Now Learning Resources Shreyas Personal
Dynamics 365 Project Service Quotes
RETURN TO DYNAMICS 36...
Generated 9/13/2017, 10:10:06 AM
Excel Online
Project Quotes
FILE HOME INSERT DATA REVIEW VIEW Tell me what you want to do
Paste Cut Copy Format Painter
Calibri 11
General
Conditional Formatting Format as Table Insert Delete Format AutoSum Clear Sort & Filter Find & Select
Undo Clipboard Font Alignment Number Tables Cells Editing
Type Status Potential Customer Account Manager
Quote profitability
Not Profitable Profitable
Total
Profitability
Quote schedule estimation
Estimated To Finish Early Schedule Not Available Estimated To Finish Late
Estimated Schedule
CRM Implementation CRM Offshore Quote 2 CRM Offshore Quote 3 CRM Offshore Quote 4
Name
Quote totals
Quote vs. Customer Budget
Project Quotes profitability bystatuspotentialcustomer schedulefeasibility quotevscustomerbudget salesandcost bystatus data
HELP IMPROVE OFFICE

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 of 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